85-0195/

The **Economic Council of Canada** was established in 1963 by Act of Parliament. The Council is a Crown corporation consisting of a Chairman, two Directors and not more than twenty-five Members appointed by the Governor in Council.

The Council is an independent advisory body with broad terms of reference to study, advise and report on a very wide range of matters relating to Canada's economic development. The Council is empowered to conduct studies and inquiries on its own initiative, or if directed to do so by the Minister, and to report on these activities. The Council is required to publish annually a review of medium- and long-term economic prospects and problems. In addition it may publish such other studies and reports as it sees fit.

The Chairman is the Chief Executive Officer of the Council and has supervision over and direction of the work and staff of the Council. The expenses of the Council are paid out of money appropriated by Parliament for the purpose.

The Council as a corporate body bears final responsibility for the *Annual Review*, and for certain other reports which are clearly designated as *Council Reports*. The Council also publishes *Research Studies, Discussion Papers* and *Conference Proceedings* which are clearly attributed to individual authors rather than the Council as a whole. While the Council establishes general policy regarding such studies, it is the Chairman of the Council who bears final responsibility for the decision to publish authored research studies, discussion papers and conference proceedings under the imprint of the Council. The Chairman, in reaching a judgment on the competence and relevance of each author-attributed study or paper, is advised by the two Directors. In addition, for *authored Research Studies* the Chairman and the two Directors weigh the views of expert outside readers who report in confidence on the quality of the work. Publication of an author-attributed study or paper signifies that it is deemed a competent treatment worthy of public consideration, but does not imply endorsement of conclusions or recommendations by either the Chairman or Council members.

Government Assistance to Export Financing

The Authors

André Raynauld

Born in Quebec, he holds a B.A. and an M.A. in industrial relations from the University of Montreal, as well as a Ph.D. in economics from the University of Paris (1954). He taught at the University of Montreal from 1954 until 1971, when he was appointed Chairman of the Economic Council of Canada. From 1976 to 1980, he sat in the Quebec National Assembly as the Member for Outremont. Since 1980, he has been Full Senior Professor at the University of Montreal and Associate Researcher at the Centre de recherche en développement économique at the University of Montreal. He holds two honorary doctorates, from the University of Ottawa and the University of Sherbrooke, and is the current president of the Canadian Economics Association. He has published 14 books and more than 50 scientific articles.

Jean-Marie Dufour

Born in Montreal in 1949, he studied mathematics at McGill University (B.Sc.), statistics at the University of Montreal (M.Sc.), and economics at the University of Chicago (Ph.D.). He has taught economics and statistics at the Collège Édouard-Montpetit, the University of Quebec, the University of Sherbrooke, and the École des Hautes études commerciales. He has also been a guest researcher at the Massachusetts Institute of Technology and the University of Toulouse I. He is currently Associate Professor of Economics at the University of Montreal and a consultant with various agencies and departments of the federal and Quebec governments. He has published many articles on econometrics and public finance.

Daniel Racette

Born in Montreal in 1947, he studied economics at the University of Montreal (B.Sc. and M.Sc.) and at the University of Toronto (Ph.D.). He has taught economics at the Collège Marguerite-Bourgeois and the École des Hautes études commerciales. He is currently Assistant Professor of Economics at the University of Montreal and secretary-treasurer of the Société canadienne de science économique. He is continuing research on monetary theory and international finance.

A. RAYNAULD
J.-M. DUFOUR
D. RACETTE

Government Assistance to Export Financing

The findings of this study are the personal responsibility of the authors and, as such, have not been endorsed by the Members of the Economic Council of Canada.

© Minister of Supply and Services Canada 1983

Available in Canada through

Authorized Bookstore Agents
and other bookstores

or by mail from

Canadian Government Publishing Centre
Supply and Services Canada
Ottawa, Canada K1A 0S9

Catalogue No. EC22-114/1983E Canada: $7.95
ISBN 0-660-11383-X Other countries: $9.55

Price subject to change without notice

Contents

Preface vii

Introduction ix

1 Government Objectives in Export Financing 1
- Promoting Exports 1
- Diversifying Markets 3
- Changing the Composition of Exports 4
- Supplementing the Private Sector 5
- Matching Foreign Export-Assistance Programs 8

2 Operations of Government Financing Institutions 11
- Exports and Investment 11
- Financial Assistance to the Developing Countries 12
- EDC Insurance Programs 13
  - Risk Coverage 14
  - Types of Insurance Policies 14
  - Guarantees 15
  - Insurance Premiums 15
  - Growth in Operations 16
- EDC Loans 17
  - Principal Terms of Financing 17
  - Lending Operations 18
  - Terms 20
  - Interest Rates 21
- The EDC's Financial Structure 24
  - The Balance Sheet 24
  - Sources of Financing 25
  - The Income and Expenditure Account 26
- Other Export-Financing Programs 26
  - Quebec's "Société de développement industriel" 26
  - The Ontario Development Corporation 27
  - Official Development Assistance 27
  - The Canadian Wheat Board 28

3 Export Financing in the Private Sector 31
- Opportunities and Risks 31
- Export Insurance in the Private Sector 31
- The Role of the Banks in Export Financing 32
  - Bank Services 32

Export Financing 33
The International Business of Canadian Banks 34
The Complementarity of Public- and Private-Sector Activities 37

4 Profitability and Social Costs of EDC Financial Resources 39
Basic Concepts 39
Application 39
Measuring the Rate of Return on Invested Capital 41
Return on Assets 41
Net Return on Government Capital 44
Differences between Rates of Return, Cost of Capital, and EDC Subsidies 45
Measuring Subsidies by the Financial Cost of Capital 45
Measuring Subsidies by the Social Opportunity Cost of Capital 45
Analysis of the Results 46
Consolidated Activities: The EDC Balance Sheet and the Canada Account 48

5 A Tentative Assessment 53
Economic Mechanisms 54
Real Flows 54
Financial Flows 56
Crowding Out 57
Resource Allocation 57
Gains in Efficiency 59
Increasing Exports 59
Job Creation and the Trade Balance: Some Simulations 59
Diversification of Markets 60
Industrial Structure 61
Additional Services to Exporters 61
Correcting Distortions in Foreign Trade 62
Subsidies by Foreign Government 64
Redistributional Gains 64
The Costs of Intervention 65

6 Conclusion 67

Appendixes

A EDC Balance Sheets and Income Expenditure Accounts 69
B Statistical Tables for Chapter 2 77
C Statistical Tables for Chapter 3 87
D Rates of Return on EDC Operations (Corporate Account) 93
E Export Credit Systems in Foreign Countries 109

Notes 115

List of Tables and Figures 119

Bibliography 123

Preface

This study was commissioned by the Economic Council of Canada under an agreement with the Centre de recherche en développement économique at the University of Montreal.

The authors wish to thank the Economic Council for giving them the opportunity to conduct the study, and particularly André Ryba, director of the Financial Markets Group, who gave them his full cooperation. They also wish to acknowledge the contribution of those who kindly provided advice and information without which this research would have been impossible, especially Sylvain Cloutier, president of the Export Development Corporation.

Finally, Sylvain Bélisle and Michel Bélanger, students at the Department of Economics of the University of Montreal, proved to be outstanding research assistants, and the CRDE secretarial staff gracefully accepted the task of typing this report.

Introduction

In recent years, government export assistance has emerged as a new form of protectionism in the world. In its economic impact, it is the equivalent of a tariff: although export assistance lowers the prices of exports while tariffs raise the prices of imports, both artificially support domestic output at the expense of foreign producers. The countries trading with the nation that uses these protectionist measures will respond to both of these perceived threats with retaliatory steps of their own. At the same time, however, export assistance stimulates international trade while a tariff tends to reduce it. The two types of measures also have differing effects on resource allocation since they are applied to different industries.

Both forms of protectionism are responses to similar arguments. Some invoke reciprocity: just as Canada must impose tariffs because other countries do, it must also subsidize its exports because foreign governments subsidize theirs – a practice that is viewed, with some justification, as unfair competition. Exporters blame lost orders on the government-subsidized financing or tax relief that is available to their foreign competitors, rather than on their own prices or the quality of their own products.

Because their efforts to sell abroad are frustrated, exporters emphasize that exports are essential to their country's development and that government should therefore take the necessary steps to counter the protectionist actions of competing countries. Later in this study, the broad range of arguments presented in favour of exports is examined: economies of scale, productivity, the current-account balance, employment, diversification and specialization of markets, and so on. Others with a stronger background in economic analysis will invoke the need to offset the implicit tax on exports that is imposed by tariffs and by the resulting inflated value of the Canadian dollar.

Without questioning the merits of these arguments, it must be pointed out at the outset that the benefits that are alleged to accrue from exports actually decrease in proportion to the amount of the subsidies given by government to producers in order to generate these benefits. As a rule, subsidies are paid by the countries that provide them, not by foreign governments. The problem thus ceases to be purely theoretical and takes on an empirical dimension, and it can only be solved by identifying and measuring the expected benefits and costs.

In this study, we focus our attention on the financing of exports, and we leave aside other measures of assistance and support, such as tax or fiscal incentives, administrative rules, and so on. The analysis will be conducted in the general context of the theory of public choice. The issues to be resolved are: whether the export-financing services established by the federal government and by some provinces are useful; whether the assigned objectives are relevant; whether the objectives are being achieved; and, finally, whether these programs are beneficial to the economy as a whole.

The financing of exports has become an important question. The logistics of international trade have made it increasingly difficult to disentangle the commercial from the financial aspects of a sale. More and more, trade involves capital goods that require longer construction and installation periods, and modern marketing methods have widened the scope of projects so that benefits that were not taken into account previously may be internalized. These developments result in turn-key plants or in packages of several interdependent elements, among which medium- or long-term financing arrangements play a highly important role in determining the success of the transaction. In addition, international trade and investment activities increasingly involve developing or newly industrialized countries that require lines of credit and prefer to finance specific projects rather than borrow for general purposes. Finally, in the more advanced countries, the initiators of export projects are proliferating at an unprecedented rate, as expertise becomes more widespread, national firms enter world markets, and governments focus more attention on international issues. Thus the initiative for an overseas project may originate with a manufacturer, a consulting firm in a field such as engineering, a trade officer, a government corporation, or a very broad range of financial institutions. The overlapping of roles has led to a blurring of the distinctions between functions, with the result that a project is approved or rejected in whole and there is no way of attributing this outcome to any specific component, such as the quality of the product, the technology involved, the producer's reputation, or the terms of financing. This makes the topic even more difficult to study, but there is no question that any discussion of international trade today must include an analysis of export financing.

In addition to having a broad impact, the subject is particularly topical for two major reasons. First, the wild fluctuations in interest rates that occurred between 1979 and 1982 and the subsequent instability of the long-term capital market have caused long-term export financing to suffer, and public financial institutions engaged in these operations have had to face enormous cash-flow and viability problems. In Canada, for example, the government was forced to intervene and inject large amounts of additional funds into the Export Development Corporation (EDC). Given such conditions in capital markets, ten-year commitments at fixed interest rates with no immediate or simultaneous coverage clearly are an invitation to disaster; yet this has been the common practice at the EDC. Agreements have been signed at current interest rates and then financed in accordance with the anticipated schedule of disbursements, which are generally spread over a three-year period. When interest rates rise, losses are inevitable. These interest-rate developments have undermined the confidence and the principles with which the government and the EDC had conducted business until then and, in particular, have shaken the long-held conviction that government financing of Canadian exports did not include any subsidy.

The second recent development is the fierce international competition over the terms and conditions of export financing, and the decision by both the United States and Canada to resort officially to "crédit mixte."[1] The race to subsidize exports is now on, and the outbidding promises to be costly indeed.

Certainly, on a limited front, protectionism has won out over common sense.

This study is therefore concerned with two major issues: What benefits are expected from government intervention in export financing, in view of private-sector activities? And what are the economic and social costs of this intervention?

1 Government Objectives in Export Financing

The federal government has given responsibility for the public financing of exports to an independent Crown corporation, the Export Development Corporation (EDC). The EDC's primary activities consist in insuring exports for a broad range of risks, offering medium- and long-term credit, and providing guarantees for overseas investments.

The federal government's export-promoting efforts have not been restricted to creating the EDC. The Department of External Affairs, for example, also plays an important role in this area. Its trade officers, who are scattered throughout the world, provide invaluable information to Canadian businessmen. The department offers several programs of financial assistance for market exploration, particularly the Program of Exploration and Market Development, project-development programs, and so on. Similarly, the Canadian International Development Agency (CIDA) handles foreign aid to Third World countries. Since some of this aid is tied, it also benefits exporters in this country. The agency opens lines of credit to some foreign governments – a service similar to that offered by the EDC, but with much better terms. Finally, the Canadian Wheat Board sells grain on credit to developing countries; in recent years, its loans have even exceeded those of the EDC.

That is not to say that the private sector does not also provide export financing; quite the contrary. However, since our aim is to study the role of government in this area, our analysis focuses primarily on the EDC.

This chapter examines the objectives pursued by the federal government since the creation in 1944 of a Crown corporation offering export credit insurance. This is done, first by reviewing the debates in the House of Commons and Senate, then by examining several reports and studies used by Parliament to define its policies, in particular the momentous Gibson report (1968), tabled in the House in 1969, which laid the foundations of the current legislation. These objectives are introduced below as general topics. We should first explain, however, that our legislative history is divided into two periods. The first begins in 1944, when the Export Credits Insurance Corporation (ECIC) was established, while the second starts in 1969, when new legislation replaced the ECIC with the EDC. Both pieces of legislation have been amended several times, most often to raise the authorized capital and borrowing ceilings. Members of Parliament have therefore had many opportunities to reassert or reformulate the corporation's objectives. Nevertheless, these objectives have generally remained the same since 1944, regardless of the political party in power. Only the emphasis and the examples used have changed over time.

Promoting Exports

The fundamental objective of the Export Development Corporation Act is to promote Canadian exports. The corporation's name reflects this, and the relevant section states:

> The Corporation is established for the purposes of facilitating and developing trade between Canada and other countries by means of the financial and other powers provided in this Act.[1]

While this wording is appropriately brief, the statements by Members of Parliament provide a much more thorough description of the government's intentions. Why should exports be promoted in the first place? After all, welfare theory asserts that consumption is the yardstick for measuring our standard of living. Because exports reduce, rather than increase, the goods available for domestic consumption, they must be seen as a means, or at best an intermediate objective, while the ultimate objective is to maximize consumption or real income.

Exports can easily be viewed as a means of obtaining something else, as they are obviously used to acquire goods from abroad. In real terms, therefore, exports represent the price of imports. If these goods cost less when they are manufactured abroad than at home, they procure trade gains and net consumption gains resulting from the specialization of countries in the goods that they produce best. Additional gains are possible when the opening of new markets stimulates competition, as it most often does, and when economies of scale can be achieved in production.

When it created the ECIC in 1944, Parliament hoped to increase Canadian exports. The arguments invoked then were very general, as the initial aim was to broaden the scope of reconstruction aid to Europe. Some illustrations from the House of Commons *Debates* follow.[2]

> It is good business for Canada to get Europe re-established, because Europe was one of our best markets before the war.
>
> *Crerar, 1944, p. 5776*

> The present legislation is to assist in re-creating a healthy world out of a sick world.
>
> *Graham, 1944, p. 5783*

> [We must] encourage the re-creation of world trade.
>
> *Graham, 1944, p. 5784*

> Despite the terrific ravages of war, the Canadian exporter will be able to pick up the threads of his business if he gets the support of the government – and I approve of the bill.
>
> *Adamson, 1944, p. 5785*

> We are doing something positive and constructive to rebuild allied countries and in this way we are making it possible for our export trade to get re-established and indeed to develop beyond prewar levels and in new directions.
>
> *Ilsley, 1945, p. 2849*

> There are many reasons for the legislation, one of which is that we consider it a contribution toward the rehabilitation of those countries the economies of which have been temporarily disrupted and which have been overrun by the enemy. It is an act on the part of Canada to assist in the rehabilitation of countries which in the past have been good credit risks and which we hope in the future will again be in that position... These loans are being made also with a view to increasing mutual trade in the future.
>
> *MacKinnon, 1946, p. 3177*

> [We must] encourage trade . . . throughout the world.
>
> *Henderson, 1954, p. 2399*

> Surely it must be perfectly clear from the bill and from the remarks made in introducing it that the government stands firm on the very sound, long-term liberal policy of promoting the freest, most open kind of society possible and the maximum amount of trade.
>
> *Lang, 1969, p. 7490*

Initially, then, Members of Parliament simply wished to revive international trade, and this statement of principle resurfaced often in subsequent years, as we have just seen in the last statement above.

Later, these general statements were bolstered by references to problems associated with Canada's foreign trade. By 1957, the trade deficit was attracting considerable attention in the speeches of Members of Parliament. The importance of reducing that deficit was voiced on several occasions (Argue, 1957, pp. 1716-18, 2383; Nicholson, 1957, p. 1737).

The deterioration in Canada's competitive position compared with the European Economic Community was the subject of discussion in 1962 (McIlraith, 1962, p. 943). That same year, the House also heard expressions of hope that the ECIC would help to improve Canada's balance of payments (Scott, 1962, pp. 454-55). The House appeared to be unanimous on this point.

Improving the balance of payments has remained an objective up to the present. The EDC (1980, p. 3) sets this goal for itself: "to assist in improving Canada's balance of payments."

When Canada suffered a fairly serious recession in 1961, exports were linked to the need to create jobs during this period. This perilous association, which was established as early as in 1944, has gradually become an axiom.

> If there is going to be help to business or in job creation, I want to be among the first to be numbered among the supporters of this measure.
>
> *Jackman, 1944, p. 5784*

> Undoubtedly every Canadian will support any program of the government to facilitate exports, particularly in a time of declining employment.
>
> *Jackman, 1946, p. 3164*

> I believe this is a means by which we have actively assisted underdeveloped nations to acquire the capital goods they need. I feel the act has also been of benefit to our own economy in that the production of the goods involved has meant increased employment for the Canadian people.
>
> *Regier, 1961, p. 6608*

> I think this particular piece of legislation is worthy of support, as it enters into one of the basic needs of our economy with regard to facilitating the exportation of our surplus production.
>
> *Thompson, 1962, p. 453*

> May I repeat that, according to my way of thinking, the main objective of all our economic activities at present is to look for the appropriate cure to remedy the depressed situation of the economy, where it is to be found, so as to overcome this dreadful plague of unemployment, which is unfortunately striking certain parts of our country.
>
> *Sévigny, 1962, p. 470*

> I think it is all the more important, therefore, to bring this measure forward now in order to do everything we can to help our exporters, because in this country one in every five jobs depends on our export trade.
>
> *MacMillan, 1962, p. 553*

When the current Export Development Corporation Act was passed in 1969, the minister responsible stressed job creation, among other points, and drew support for this from the Gibson report. In 1974, during a debate on new amendments, the new minister argued that exports obviously had to be stimulated more to maintain employment levels. Before a parliamentary committee, the president of the EDC in 1974 testified that EDC financing would create 65,000 jobs that year:

> We have had exhaustive studies made by Statistics Canada and by the Department of Industry, Trade and Commerce to try to determine the primary effect of a single million dollar loan. It comes, believe it or not, to something like 100 man years. One million dollars means 100 man years of employment. That is primary. If you bring in the secondary and tertiary [effects], and the ripples that go beyond that, you can get some quite astronomical figures . . . I am told on good authority that one million dollars creates 100 man years, so if this year we will sign $650 million, there will be 65,000 man years as a result of our financing alone.[3]

There is good reason to seriously doubt the validity of these figures. Each new job would cost $10,000, which seems very low, especially in export industries. More recently, the EDC has used $27,000 per job as the rule. In any event, this impact certainly could not remain unchanged year after year regardless of the domestic economic situation. Nevertheless, these evaluation studies appear to have so convinced the EDC that its press releases and some annual reports stated the number of jobs that it expected to create.[4]

In 1978, renewed emphasis was placed on job creation:

> It is imperative that this piece of legislation be passed because it means so much to the creation [and] maintenance of jobs.
>
> *Horner, 1978, p. 4760*

> It seems to me that when we talk about a program under a corporation such as EDC, it should fit into an economic plan which should have as its priority the creation of jobs in our country, putting to work the million or so unemployed who really want to work.
>
> *Nystrom, 1978, p. 4791*

> The exporting of Canadian jobs at a time when we have over one million unemployed is a far greater consideration for us at this time.
>
> *Clarke, 1978, p. 4793*

In the autumn of 1978, an amusing but significant incident occurred in the House of Commons when the New Democratic Party tabled a bill to exclude mining companies from applying for assistance under the Export Development Corporation Act. This move echoed news headlines on the contradiction of financing Canadian investment projects abroad when the companies receiving this assistance were announcing massive layoffs in Canada: should we be building factories abroad to export equipment, if these factories subsequently put our own out of business? The argument is obviously fallacious, since there are no direct causal links between the two situations. Nonetheless, this incident does suggest that the immediate benefits of assistance may, under certain circumstances, be offset by indirect and delayed costs.

Thus the parliamentarians believe that exports should be promoted to encourage open and healthy international trade, ensure a balanced current account, and stimulate employment. A final set of arguments rooted in rather more solid theoretical considerations focuses on economies of scale and on productivity. The Gibson report, for example, noted the small size of Canada's domestic market and the need for larger outlets in order to take advantage of the opportunities for specialization and the economies of scale that exist in many industries. Access to foreign markets would then lead to an increase in average productivity by shifting resources from less productive sectors to more productive ones. As the minister responsible in 1969 stated:

> The government believes that stimulating exports is of tremendous advantage to our economy. That stimulation encourages maximum productivity in the face of competition we must meet if we are to compete with other producers in the world markets.
>
> *Lang, 1969, p. 7490*

Diversifying Markets

The federal government, as we shall see below, has introduced several major qualifications to its objective of promoting exports. Despite the general statements quoted above, it is obvious that Parliament's primary intention has been to diversify Canada's foreign markets and to help exporters enter new markets. And indeed, the EDC's intervention instruments are designed for overseas sales, not the U.S. market.[5] Nor do the debates make any reference to increasing exports to our southern neighbour. The goal, of course, is to increase total exports, but this expansion was first expected in Europe, then in eastern-bloc countries, and more recently in the developing countries.

In the preceding section, we stated that the initial legislation was aimed specifically at Europe, and we found several statements to support this.

In 1954 and over the next few years, emphasis was placed on the need for Canada to do business with eastern Europe in order to dispose of its enormous surpluses of wheat:

> Yet if there is an opportunity for us to expand our trade with Russia at this time I think we should go ahead and do it, and I think one of the first steps to do that, would be to utilize this act.
>
> *Thatcher, 1954, p. 2220*

> As to the general desirability of trade beyond the iron curtain, it seems to me in the broad that if there are any genuine signs of wanting to trade we should be responsive to them.
>
> *Macdonnell, 1954, p. 2398*

During this debate in February 1954, the Minister of Trade and Commerce stated that the ECIC did not assist exports to the United States because the private sector could adequately handle this market.

Similarly, in February 1962, a fairly long debate occurred over Canada's trade relations with the communist countries, although the tone appeared to be much less favourable this time, as Parliament was then preoccupied with Canadian policy towards Cuba.

The years 1961 and 1962 also marked a shift towards the developing countries. One Member pointed out that the new African countries would require equipment and supplies to build their infrastructure and develop their natural resources:

> That is the purpose of this particular legislation. I am relating it particularly to the countries in Africa and the necessity of those countries in the free world which have the resources, being able to supply to the newly emerging nations of Africa the machinery and the equipment to open the mines, to build the roads and to build the schools which are so very essential.
>
> *Baldwin, 1962, p. 948*

A few months later, a Member suggested opening the doors to South America while stressing the importance of foreign trade to the Canadian economy. Another Member followed suit and encouraged the government to increase aid to Third World countries (Côté and Howard, 1962, p. 559).

The developing countries were the central topic in 1969 when the new act was passed, since the government used the occasion to introduce a new program of guarantees for Canadian investments. The minister responsible carefully emphasized that the new guarantees would complement existing aid programs for developing countries. A senior official in the Department of Industry, Trade and Commerce added the following details:

> [The investment guarantees program] was developed almost parallel – in two parallel ways if you like – by the former Department of Trade and Commerce thinking of the effect that investment can have in particular cases on the growth of Canada's export trade or the maintenance of markets. And simultaneously, the External Aid Office, as it was then, was thinking about the ways in which investment in developing countries could add a new dimension or fill a gap in our aid program. It also contributes to the attainment of the 1 per cent international aid target, 1 per cent of the gross national product, so that a private investment in a developing country reduces to that extent the pressure on the government to provide official funds.[6]

> My second comment is that I am delighted to see the reference to encouraging foreign investment; that is, investment by Canadians in foreign countries. I think this is very much in the Canadian interest, not so much from the point of view of assisting the developing world as from the point of view of assisting Canadians to develop outward-looking and more entrepreneurial attitudes in world markets.[7]

These government efforts to diversify foreign outlets were supported by the Canadian Export Association. Two of the CEA's proposals in 1969 were to intensify trade with overseas countries and to strive generally for the greatest possible range of outlets.[8]

> Because of this country's great dependence on the United States market – we ship 70 per cent of our exports to that market – and the steady move of that country toward protectionism, the development of additional markets has become particularly necessary.
>
> *Hees, 1978, p. 4807*

Clearly, therefore, diversifying Canada's trade partners is one of the government's objectives in its export-financing activities.

Changing the Composition of Exports

When the federal government entered the field of export assistance, it had a fairly specific list of foreign countries in mind, as well as preferences for the categories of products that it wished to promote. Aside from Parliament's concern with surplus grain in 1957, successive governments have shown remarkable continuity in favouring processed goods over raw materials. Priority has recently been extended to some services as well, to reflect changes in the composition of international trade. Both the ECIC and the EDC were assigned the task of helping to restructure the Canadian economy. In other words, the government's export-financing activities can be considered as evidence of an industrial policy or strategy based on the manufacturing industry. That is the interpretation that must be given to an opposition Member's statement in 1964 that these activities had been

> ... one of the keystones of our economic development.
>
> *Nowlan, 1964, p. 4804*

This concern had been present for a long time:

> I can say to the honourable member at the outset that [the beneficiaries of the act] will be largely the smaller exporters of manufactured goods. But the legislation makes provision to cover any exporter of any line of goods.
>
> *MacKinnon, 1944, p. 5778*

As already mentioned, the December 1957 debates were dominated by the question of surplus wheat. Both the government and the opposition wanted the ECIC to offer long-term credit facilities to potential wheat buyers, primarily in response to a U.S. policy that already provided such financing.

Processed goods regained their priority status in 1961, however, when the minister responsible pointed out that, in both his and the government's opinion, exports of capital goods with a high Canadian content (80 per cent) had to be encouraged. Reference was made the following year to heavy capital goods, and the opposition called for the government to place more emphasis on manufactured products.

> If we wish to take care of the unemployment situation in this country, we have to emphasize and advance quickly those goods which employ an increasing amount of Canadian labour in their manufacture.
>
> *Laing, 1962, p. 554*

In 1964, the new minister proposed extending ECIC insurance to engineering and construction firms.

In a 1969 debate, opposition Members expressed concern that the new legislation should be aimed primarily at export of manufactured products:

> Of course, I am in favour of exports and the expansion of exports. However, to my mind top priority should not be given to the exporting of our raw materials when they are required in our own country. I cannot feel that the Export Development Corporation or any similar institution should be able to assist such exports at a time when there are unemployed in our own country available to undertake secondary manufacturing.
>
> *Winch, 1969, p. 7488*

> The fundamental point is that when we export our raw materials or natural resources in their near-raw state, we are exporting job opportunities for Canadians.
>
> *Howard, 1969, p. 9780*

The minister responsible agreed, and he described the export services that he considered to be important before a parliamentary commission. He pointed out that the act applied to the area of services and other invisible exports, and he later stressed that the provision of technical services could lead to exports of processed goods.[9]

The minister responsible in 1974 indicated that one of the EDC's objectives was to promote manufacturing and service activities in Canada. As one of his colleagues stated:

> The impact of these measures will be particularly significant for Canada's capital goods manufacturing and service industries. It is through the development of these industries, to which continuing export markets are so vital, that we can in turn foster the development of Canadian industrial technology and employment opportunities.
>
> *Drury, 1974, p. 526*

The objective of promoting and strengthening Canadian manufacturing industry is so widely accepted that any mention of it in connection with export financing comes as no surprise. This wide acceptance is based on several reasons, some of which have not always been carefully questioned or supported. The usual argument is that processing is more labour-intensive and generates more value-added per unit of output; that it increases productivity; that it enjoys faster growth in demand; that it has a higher innovation and R&D content; that it benefits from greater economies of scale; that it is better suited to urban locations and thus to worker preferences; and that it has greater forward and backward linkages and thus produces a stronger economic fabric to better withstand cyclical shocks.

The main criticism of this type of analysis is that it is far too general. None of the benefits cited applies to each and every processing industry; and, conversely, there may be just as many differences between two of these industries as between the entire manufacturing industry and the other sectors of the economy.

Supplementing the Private Sector

Another prevailing theme related to government objectives is that the government should abstain from intervening when the private sector is able to provide the services required, but should play a supplemental role when there is market failure. This view is consistent with the theory of public choice, which is now the accepted wisdom in these matters and indeed serves as the basis for our own study.

A review of the Commons debates makes it quite obvious that the legislators were unanimous on the need to preserve the role of private financial institutions but that they also acknowledged that government should provide additional services wherever they would supplement, rather than compete with, those of the private sector. The numerous statements on these points are quite clear.

When the first bill was tabled in 1944, the Minister of Trade and Commerce was careful to point out repeatedly that no private insurance company was prepared to cover the type of risks included in the bill.

> It is not the thought that the corporation will compete with the banks at all, and I am sure that the banks will welcome this legislation as an assistance to their customers.
>
> *MacKinnon, 1944, p. 5775*

And later:

> The corporation does not invade the field of private enterprise in any way. Its one objective is to provide Canadian exporters with services and facilities that cannot be furnished by private insurance companies.
>
> *MacKinnon, 1946, p. 3170*

The minister reported in 1946 that only two private companies would insure exports, and then only those exports destined for the United States or Newfoundland.[10]

In 1948, the debate centred almost entirely on the matter of supplementing the activities of the private sector. The minister responsible noted:

> My experts assure me there is not a private firm in any part of the world doing that kind of [insurance] business.
>
> *Howe, 1948, p. 3050*

An opposition Member remarked:

> The other night, I asked the minister a question with reference to the position of private insurers, and he told me that there were practically no private insurers who wanted to engage in this kind of business because of the risks involved.
>
> *Macdonnell, 1948, p. 3048*

The situation remained the same in 1954, when the minister again gave a speech in the House on export insurance (Howe, 1954, p. 2217). A few days later, another Member added that the ECIC did not insure exports to the United States because the private sector was active in that field (Dickey, 1954, p. 2396).

In 1957, the debate resumed, as a Member reaffirmed the ECIC's supplemental role:

> The real significance is that this corporation is by itself in this field for the simple reason that the risks and lack of profit involved are such that no commercial company looking for profits is prepared to go into it. That is the simple reason that it has the field to itself.
>
> This is a corporation that was set up to provide a service for Canadian exporters that no private corporation was prepared to give because they were not in a position to underwrite the possibility of loss and cover that possibility of loss with premiums calculated on an actuarial basis, which is the normal way an insurance company calculates its premiums. For that reason, this corporation is not enjoying a monopoly field for some advantage to itself. It is working in a monopoly field because of the inherent risk involved and to provide a service that otherwise would not be provided to Canadian exporters.
>
> *Dickey, 1957, p. 1736*

In 1962, a Member stated that the ECIC should never act as a substitute for private firms wishing to enter the export-finance field (McIlraith, 1962, p. 944).

In turn, the minister responsible in 1964 reiterated earlier statements:

> In addition there are no commercial enterprises in Canada providing services comparable to the facilities provided by the Export Credits Insurance Corporation.
>
> *Sharp, 1964, p. 4863*

One of the objectives of this study is to identify more accurately any market failures – i.e., the non-provision of certain types of services by the private sector – that might justify government intervention.

Most of the passages quoted above refer to insurance, as that was the ECIC's primary activity until the 1970s.

Gibson (1968) examined this subject in greater depth. Echoing many Members of Parliament, he noted that the private insurance available was inadequate and that exporting involved additional risks beyond those incurred in the domestic market. The Gibson report also analysed the terms of financing and concluded that the banking system failed to provide exporters with all of the services that they required. It pointed out the problems that banks faced in lending on the collateral of export orders from remote and unknown purchasers. The report also noted that, while banks focused their operations on short-term credit, there was a clear need for long-term credit. In addition, banks offered only floating interest rates on the financing of overseas sales, but exporters were often required to quote fixed prices. Furthermore, the writer believed that Canadian banks were in a precarious situation even in the United States, since the government there could, if it wished, prohibit a loan or the subsequent counterpart in U.S. dollars if the loan had already been approved. Finally, the report revealed that exporters criticized the banks' handling of information and promotion of their business.

In practice, supplementing the private sector means that the EDC is expected to offer services that the private sector does not provide and to seek the cooperation and financial participation of banks in order to operate on a commercial basis.

In a 1980 speech, the EDC president, Sylvain Cloutier, discussed with unusual candor his guidelines for dealing with the banks and quoted from a statement (EDC, 1980) that had been adopted by the corporation's Board of Directors and submitted to its sole shareholder, the federal government:

> The corporation encourages maximum private sector involvement in the provision of services to exporters, consistent with the requirement of international competition, and conducts its affairs in accordance with commercial principles and disciplines, seeking, in the long term, to generate sufficient revenues to at least cover all costs and preserve the invested capital.[11]

The EDC achieves this bank involvement through four mechanisms:

> a) by offering exporters services that facilitate their banking arrangements;
>
> b) by offering guarantees to other financial institutions providing letters of credit or other financial services to exporters or making loans to foreign buyers in respect of export transactions;
>
> c) by inviting other financial institutions to share in the financing of Canadian goods and services and to provide complementary financing with respect to down payment, construction period, third country supply, and local costs; and
>
> d) by organizing the provision by other financial institutions of packages of services which may or may not include EDC services.[12]

There is little doubt that the banks have used these EDC services to considerable advantage, but the situation in other respects is not as clear as may be apparent at first. If the EDC were operating on a strictly commercial basis in markets or market segments other than those in which the private banks are active, the government would achieve its objective of not infringing on the private sector. However, such a situation would raise a basic question: Why, then, do the banks refuse to provide services identical to those of the EDC? The contradiction is irreconcilable. The answer to the question is obvious: EDC claims notwithstanding, the agency does not operate on a commercial basis. As we note below, it is able to offer long-term credit at fixed rates – a risk that the banks cannot accept. As a Crown corporation, in fact, the EDC enjoys considerable advantage over the commercial banks: it is exempt from income tax; with government backing, it borrows in financial markets at preferred rates; it has more power to negotiate with its customers to reduce risks of loss; and finally, it is not required by its sole shareholder to produce the same return on invested capital that is expected by private shareholders. These advantages are assessed in a later chapter.

In the present context, one can readily agree that the EDC does, in fact, pursue a supplemental objective and that it attempts to promote the operations of private financial institutions. It is able to do so precisely because it is not subject to the same financial constraints.[13]

Before closing this discussion of potential market failures, it should be mentioned that in the early 1960s and in more recent times Parliament has devoted special attention both to regional development and to small and medium-sized firms. Thus these two subjects are not totally unrelated to the reasons for government intervention. In fact, some EDC statements and press releases have referred to the agency's contribution to a more balanced development of Canada's regions.

It goes without saying that small businesses are a constant public concern. All governments – federal, provincial, and local – are continually trying to outdo each other in new and imaginative ways to assist these firms with preferential income tax rates, technical services of all kinds, capital grants, and special public lending institutions, such as the Federal Business Development Bank and similar agencies in almost all provinces.

The only remaining question, therefore, is whether small businesses should also be encouraged to export. The answer from both the federal and provincial goverments is a definite yes.

> I sincerely hope that the minister and whoever may succeed him in the Government of Canada will ensure that in future funds that are expended by the Export Development Corporation will be expended to the benefit of smaller businessmen to a much greater extent than has been the case to date.
>
> *Stevens, 1974, p. 2442*

> I think the EDC should help the small company to compete with the giants.
>
> *Nystrom, 1974, p. 2445*

> We should probably make some changes in the EDC legislation so that it would direct a lot of its capital toward helping small companies in this country.
>
> *Nystrom, 1978, p. 4791*

In 1979, the Hatch report[14] devoted two sections to small businesses and suggested several mechanisms for special assistance to them. Finally, the culmination of these efforts in 1981 was the creation of a special House of Commons Committee on a National Trading Corporation, which was specifically assigned with suggesting measures to help small businesses increase their exports.

Matching Foreign Export-Assistance Programs

The last objective, but by no means the least, is to make the Canadian export-assistance program competitive with those of other countries. In fact, the federal government considers this as an obligation to Canadian exporters rather than as just one more objective, and this view of the question appears to be shared by everyone concerned. The same rule applies as in advertising: we must do it because everyone else does it. If French or Japanese exporters gain some advantage through their government while competing directly with a Canadian exporter in a third country, the Canadian firm may well lose the sale as a result and may thus consider itself a victim of unfair competition.

Not surprisingly, then, this has been a major government concern since the first bill was introduced in 1944. The minister at that time noted that 18 countries were already providing export-insurance programs; he added:

> In other words, exporters must compete on the basis of price, quality, service and similar factors and use the insurance system merely as a means of protecting themselves from certain risks. To this extent it will place Canadian exporters in a position of competitive equality with the exporters of other countries who are offered similar insurance schemes.
>
> *MacKinnon, 1944, p. 5774*

In 1948, the minister responsible spoke at length on competition from foreign governments:

> The Amendment to the Export Credits Insurance Act will give our exports competitive equality with the exporters from foreign countries who already benefit from this kind of insurance.
>
> *Howe, 1948, p. 2775*

In 1957 and again in 1959, the new minister of Trade and Commerce used the same expression:

> We must give our exporters competitive equality with the exporters of other countries.
>
> *Churchill, 1959, p. 4279*

In 1961, the minister announced that Canada would have to provide exporters with services equivalent to those offered elsewhere. The following year, an opposition Member stated:

> Every assistance must be given to our exporters to meet the kind of competition they have to meet on world markets.
>
> *McIlraith, 1962, p. 943*

The same remarks were heard again in 1974 and 1978:

> EDC only matches foreign competition, it does not undercut it.
>
> *Drury, 1974, p. 528*

> The purpose of the Export Development Corporation financing is to match the officially supported financial competition from abroad.
>
> *Horner, 1978, p. 4759*

Our review of Commons debates reveals that similar arguments can be found in almost all the statements made to date, but these are too numerous to repeat here. Since the Gibson report was accepted by the government, it is more instructive to use this report to obtain a more complete and accurate point of view.

Gibson comes straight to the point, and we agree with his interpretation:

> There is a strong conflict at present between these two criteria for interest rates – the market and the intergovernmental competition.[15]

In fact, this intergovernmental competition is so predominant that Gibson sides with Parliament in giving it priority:

> Such is the importance of developing Canada's export industries, however, that competition factors take precedence over market costs of money in determining interest rates for export credit. If we want to sell the goods, we have to meet the competition.[16]

The proper objective is therefore clear: Canada cannot forgo export assistance if other countries provide it. However, Gibson hastens to add a qualification that is obviously necessary. He continues his sentence above: "... and this applies to the credit element *within reason*."[17]

In effect, he is saying that, since resources are limited, they too must be allocated in the most efficient manner possible, in accordance with the larger goals of any society. Gibson even stresses that "exports in themselves have no ultimate merit."[18]

In his 1980 speech, the president of the EDC reaffirmed the validity of this analysis. He first noted that the member countries of the European Economic Community and Japan were subsidizing their exports "regardless of the currency being loaned or the cost of funds to national treasuries."[19] He then deplored the continuing growth of "crédit mixte" abroad and the pressure exerted on the EDC "to match the competition regardless of the financial consequences,"[20] adding:

> Frankly it is just not good enough to call for a policy of matching the competition without regard to the financial consequences.[21]

Nonetheless, the federal government announced in 1981 that it would grant $900 million to the EDC over three years for the specific purpose of subsidizing Canadian exports when foreign "crédit mixte" is available. The Minister of Industry, Trade and Commerce made it clear that these grants would be provided in specific cases "to keep up with our competitors, when it is obvious they are using this form of export subsidy."[22] This would appear to be a grudging concession – but a concession nonetheless.

As stated earlier, the objective of meeting foreign competition is clearly there. However, the benefits expected from export financing will have to be shown to exceed the social opportunity cost of the public funds required for this purpose.

These, then, are the government's major reasons for providing insurance and credit to Canadian exporters. The reasons have been grouped into five categories, each one corresponding to a section in this chapter. Briefly, the federal government believes that there is a public interest in promoting exports because they help to increase the efficiency of the Canadian economy; it also wishes to diversify export markets and to change the composition of exports in favour of processed or end products; it does not intend to supplant the private sector but argues that the distortions introduced into the market mechanisms by foreign governments require the adoption of a more interventionist policy.

2 Operations of Government Financing Institutions

Having studied the objectives of the export-financing operations of government, we can now examine what these operations are. In this essentially descriptive chapter, we first discuss the level of EDC activity in the fields of export insurance and export credit. We then take a brief look at the structure of the corporation's financial statements. Finally, we review other export financing agencies such as Quebec's Société de développement industriel, the Ontario Development Corporation, the Canadian International Development Agency, and the Canadian Wheat Board. But first, we make a quick survey of Canada's total exports and investment abroad to provide the general context within which these government agencies operate.

Exports and Investment

We saw in the preceding chapter that one of the main government concerns in the area of exports is the excessive concentration of Canadian trade in the United States and the predominance of raw materials in the products sold abroad. Both assumptions are correct.

For many years, the United States has absorbed almost 70 per cent of Canadian exports. In comparison, the member countries of the European Economic Community (EEC) sell only 6 per cent of their exports to the United States, while Japanese exports to that country account for 25 per cent of all exports.

In the context of this study, trade with the developing countries takes on special importance. The United States and Japan have strong commercial ties in these new markets: more than one-third of U.S. exports and almost half of Japanese exports are shipped to these countries (Table B-1). Canada, on the other hand, ships only about 10 per cent of its exports to developing countries – a very small figure. Furthermore, the growth rate of such sales since 1970 has been lower than the corresponding figures for the United States and Japan. The EEC's presence in developing countries is much smaller, in relative terms, than is usually thought, since only 16 per cent of its exports are shipped to Third World countries. Nevertheless, these exports are very large in absolute terms: US$94 billion, compared with $60 billion for the United States and $50 billion for Japan.

The networks implied by these patterns are largely the result of the geography and economic history of the trade partners. Half of U.S. exports, for example, are sold in North or South America; similarly, two-thirds of EEC exports are sold in western Europe. Japan lacks such good customers among its neighbours; nonetheless, its largest sales are in Asia, amounting to 30 per cent of its exports. The evidence concerning other flows is also revealing. For example, while the EEC member countries buy 22.5 per cent of U.S. exports, the United States buys only 6 per cent of their exports.[1] In relative terms, the U.S. market is therefore not a determining factor for the EEC.

If we add up the exports for all four groups of countries, the total reaches US$906 billion, of which 23 per cent is sold to the developing countries. That proportion may seem high or low, depending on who is looking at such figures, but when one realizes that it represents annual exports of $210 billion (in 1979 dollars), all doubt is dispelled: Third World markets are of major significance for the industrialized countries. Canada's relative position in these markets is disappointingly small, however. Canadian exports account for 6 per cent of the total exports of the four groups considered here but for only 2.4 per cent of their exports to the developing nations. Thus Canada's share of this market is only less than half that of its total exports. Or to put it in a positive way, Canada's exports to the developing countries should be increased from 10 to 23 per cent of all its exports in order to achieve the average level attained by the other countries examined here.[2]

A second feature of Canadian exports concerns the product mix. There is a very high concentration in raw materials and, conversely, a relatively small share of processed or finished products. Table B-2 provides a comparison in this respect between Canada, the United States, the EEC, and Japan, using the ten major product categories of the standard international system of classification (SITC). Table 2-1 provides a clear picture of the differences with respect to the overall mix.

Table 2-1

Distribution of Export Products, Selected Countries, 1979

	Raw materials[1]	Processed goods[2]	Other goods[3]	Total
	(Per cent)			
Canada	34.7	55.0	10.3	100
United States	15.2	67.2	17.6	100
European Economic Community	9.9	77.8	12.3	100
Japan	1.6	96.1	2.3	100

1 Categories 2 and 3 of the SITC code.
2 Categories 5, 6, 7, and 8 of the SITC code.
3 Remaining categories, primarily food products.
SOURCE Table B-2.

The extreme character of Japan's export picture is startling. It is common knowledge that Japan lacks natural resources and concentrates on selling processed products, but one is astonished to discover how closely this view reflects that country's actual export mix, with raw materials making up less than 2 per cent of its sales abroad. Compared with the United States and the EEC, Canada is two and three times more specialized, respectively, in exports of primary products. While it also exports processed goods, the proportion is much lower than that for other industrialized countries. Table B-2, which is more detailed, alters this judgment slightly. In machinery and transportation equipment (category 7), for example, Canada exports almost as much as the EEC, in relative terms. But contrary to a fairly common view, Canada does not seem to have progressed as rapidly in these sectors as in the others. In 1979, machinery and transportation equipment represented a smaller proportion of Canadian exports than in 1970.

These relative specialization patterns for Canada are confirmed by the trade balances. Table B-3 reveals that, in 1980, this country incurred a $16 billion deficit in foreign trade in inedible finished goods. This deficit was offset by a surplus of similar size in semi-finished goods. The overall trade balances were largely positive, because Canada recorded additional surpluses in raw materials and food products. If the year 1975 is excluded, Table B-3 indicates a fairly strong tendency towards improving the total trade balance since 1972 and a remarkable stability in the respective balances for the various groups of products, although finished goods still register a deficit while other groups record a surplus.[3]

Financial Assistance to the Developing Countries

Government export insurance and financing can also be analysed in the context of all capital transfers. When public financing involves the developing countries, it is useful to examine briefly the volume of what are called financial contributions or capital flows.[4]

Table 2-2 highlights the main points. The member countries of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) provided US$75 billion to the developing countries in 1980. This sum included net disbursements (gross disbursements less repayments during the year) of capital in all forms, with a few exceptions.[5] Of this total amount, $27 billion consisted of "official development assistance" (ODA) contributions, while $48 billion was made up of loans and investments. A very large share of the capital flows in the second category was provided by the private sector. Bank loans, for example, included under the heading "private investment," amounted to $19 billion in 1980. Export credits totaled almost $15 billion, with a fairly random distribution between public and private shares from one country to another.[6] Direct investment is another major category of capital flows, representing $8.9 billion in 1980.

Table 2-2

Net Financial Assistance to Developing Countries Provided by Member Countries of the OECD's Development Assistance Committee and by Canada, by Type of Assistance, 1980

	DAC countries	Canada
	(US$ millions)	
Official development assistance	26,800	1,036
Public export credits	2,100	634
Direct investment	8,900	289
Private investment	19,168	1,283
Private export credits	12,568	-39
Other assistance	5,550	130
Total	75,086	3,333

SOURCE OECD, *Development Co-operation: 1981 Review*, pp.182 and 186-87.

Gross disbursements by creditor countries largely exceeded the net amounts recorded in Table 2-2. Gross disbursements for export credits amounted to almost twice the net payments – $34.8 billion, compared with $15 billion.[7] The same applied for bank loans.

When these capital flows are not returned in the same year, they accumulate. By the end of 1980, the total outstanding loans and investments in developing countries amounted to US$456 billion, a very large sum.[8] Thus, while lenders and investors show no reluctance towards operating in the developing countries, the indebtedness of the latter is reaching proportions that many observers find dangerous, if not alarming.

Canada's place in this global context is fairly modest, but its financing activities are proportionally much greater than its export activities in the developing countries (Table 2-3). Capital financing activities related to the developing countries totaled almost C$4 billion in 1980. This sum represents a 50 per cent increase over net disbursements made in the preceding year.

Table 2-3

Total Canadian Capital Flows to Developing Countries, by Category, 1979 and 1980

	Net disbursements	
	1979	1980[1]
	(C$ millions)	
Official development assistance	1,201.0	1,212.0
Other government contributions:		
Bilateral		
Canadian Wheat Board	114.8	440.8
Export Development Corporation	373.0	351.8
Multilateral	-14.1	-19.6
Subtotal	473.7	733.0
Private contributions:		
Bilateral		
Direct investment	-117.1	337.9
Export credit	-49.6	-45.2
Bank loans	1,048.4	1,499.0
Multilateral	-39.8	1.2
Subtotal	842.0	1,793.0
Donations from nonprofit agencies	112.5	119.3
Total	2,629.0	3,897.0

[1] The data for 1980 are identical to those in Table 2-2 for Canada, except that the figures here are in Canadian dollars while the figures in the previous table are in U.S. dollars.

SOURCE CIDA (1980), Tables II-1, IV-1.

These resource transfers occur in several ways. One is through ODA payments, which amounted to $1.2 billion in 1980; another is government export credits from the Canadian Wheat Board and the EDC. (Interestingly, payments to the developing countries were larger for the Wheat Board than for the EDC: $441 million *vs* $352 million.) The private sector provides funds roughly equivalent to those from the public sector. Bank loans are particularly significant, having amounted to nearly $1.5 billion in 1980.

That is the background to Canada's trade and financial role in the world. In light of this general context, we now turn to the EDC's activities and those of other government agencies involved in export financing.

EDC Insurance Programs

Apart from the American Credit Indemnity Company of New York, which handles Canadian sales to the United States, the EDC is the only firm in Canada that insures exporters for most risks involved in foreign trade throughout the world. With only a few exceptions (discussed below), the EDC offers a fairly complete range of insurance services, comparable with those in other industrialized countries.

In general, the EDC insures commercial and political risks up to 90 per cent of the value of the sales, with the remaining 10 per cent to be covered by the exporter. Contrary to the situation prevailing in several other countries (such as Japan), the Canadian programs are very flexible and are never compulsory. Even when an exporter receives a direct loan from the EDC, he is not required to obtain insurance. Similarly, with some exceptions, the exporter may choose the risks that he wishes to cover, the countries with which he deals, or the types of transactions that he plans to conduct. An additional element of flexibility was announced in 1981: following repeated requests, small businesses are now able to obtain insurance for political risks only, if they so desire.[9] Similarly, an exporter may exclude from an insurance policy all transactions with the United States, exports paid in advance, or exports already guaranteed by irrevocable letters of credit. Finally, the length of insurance coverage varies by product and is adapted to the actual payment schedules.

Before proceeding with the description of the various services provided by the EDC, we should stress that the corporation requires a minimum Canadian content in exports for producers to make use of its services. That requirement is designed to meet the EDC's objective of promoting Canadian exports.

In most cases, Canadian content must be 60 per cent before a loan or insurance application is even considered. When necessary, the EDC will assist exporters in finding domestic suppliers to maximize Canadian content. If the Canadian-content requirement is not respected, the EDC may decrease the proportion of the sales that it will insure.

Risk Coverage

There are two types of insured risks: commercial risks and political risks. Commercial risks consist essentially of nonpayment of goods by the purchaser except when there is a dispute. Political risks consist of decisions by the country of the purchaser that effectively prevent the exporter from being paid because they create circumstances that neither he nor the purchaser can control, such as the blocking of funds, the cancellation of an import permit, armed conflict, and so on.

Since the end of 1978, EDC insurance policies have covered sales quoted not only in Canadian and U.S. dollars but also in the currencies of 15 other countries. The risks of fluctuating exchange rates, however, are not covered by this insurance.

While the range of risks covered by EDC programs is fairly broad, it excludes two basic risks of prime concern to exporters: the "economic" risk resulting from inflation, and the "exchange rate" risks associated with the fluctuations in the value of currencies. These contingencies may arise more frequently – and they may result in much heavier losses – than those which are insured. Several other governments have long provided protection against this type of risk, and Canadian exporters have been calling for an additional program of this nature. The Hatch report supported this demand; in fact, it explicitly recommended that the EDC extend its insurance program for this purpose.[10] The report went even further by adding that the premiums should be attractive, which under the circumstances automatically implied a policy of open subsidization. The House of Commons Special Committee on a National Trading Corporation also recommended that

> ... the Export Development Corporation investigate the applicability to the Canadian situation of insurance schemes offered in other countries for (a) foreign exchange rate fluctuations and (b) cost increases due to domestic inflation.[11]

The programs of some foreign countries for exchange-rate and inflation risks have been described and briefly discussed elsewhere by one of the authors of this study (Raynauld, 1979, pp. 36-43); that analysis will not be repeated here. We wish simply to point out that such protection can prove very costly to the public treasury. In France, the Pisani report (1980) stated, for example, that covering the inflation risk would have cost the French government almost 3 billion francs during 1978 alone. Following the radical changes that were made by the French government to this program in 1977, coverage of the inflation risk applies only when inflation rates exceed 11 or 11.5 per cent. This widely cited and much abused French example would appear to give cause for reflection rather than provide a model to follow (see p. 22 below). Italy suspended application of its plan in 1974, probably for the same reason.[12] Exchange-rate risks are probably smaller than the risks of unanticipated inflation: first, they only involve contracts quoted in foreign currency; and, second, sudden drops in the currencies generally used in international trade are exceptions rather than the rule. In some periods (such as at present), however, the great instability of currencies could have disastrous consequences for unprotected exporters or for government treasuries providing insurance coverage.

Types of Insurance Policies

Short-Term Insurance

The major insurance programs include policies that are valid for 180 days or less and that cover all exports by the insured to the markets that he chooses to cover.

The exporter can obtain coverage from the time of shipment ("global shipments insurance"), from the signing of the contract ("global contracts insurance"), or from the moment at which services begin to be provided ("global services insurance"); in all cases, coverage extends until the date of payment. The problem that is raised by these insurance programs is of an administrative nature. The exporter must obtain EDC authorization if he is selling to new customers or if the sums exceed the discretionary limits set in advance. Since these limits are fairly low, he is therefore required constantly to return to the EDC, and he must submit monthly reports in order to be billed accordingly. These procedures are burdensome and costly.

During 1980, the EDC issued 696 global shipments policies covering almost 2 billion dollars' worth of exports – a 49 per cent increase over the preceding year. For global contracts insurance, the amount of insured exports was $191 million – a 100 per cent increase over the preceding year. Finally, exports of insured services dropped to $16 million in 1980 from $27 million in 1979. These short-term policies form the lion's share of the EDC's insurance operations. In 1980, they represented 80 per cent of all insured exports and 70 per cent of all policies (see p. 17).

Medium-Term, "Specific Transaction" Insurance

This type of insurance covers individual orders for capital goods sold under credit terms of one to five years, from the date of the signing of the contract or from the date of shipment of the goods. It is adaptable to all types of needs, such as lease contracts, service contracts, and so on. The purchaser must make an uninsurable down-payment of 15 per cent.

In 1980, the EDC signed 36 policies of this type, covering 281 million dollars' worth of exported goods. The volume of business varies widely from one year to the next. Almost 50 per cent of the policies covered exports of more than $1 million in 1980.

Loan Pre-Disbursement Insurance

This insurance covers production risks from the date of approval of the financing until the date of disbursement under the terms of the loan agreement. In 1980, some 37 new policies came into force for exports worth $156 million. The value of exports under this item has dropped sharply since 1978.

Performance Bonds

The EDC offers three insurance policies for the provision of performance security to importers.

To understand the attractiveness of this insurance, one must know that importers require a guarantee that exporters will meet their obligations. In North America, surety companies provide performance bonds on behalf of the exporter, but elsewhere these guarantees are provided by the exporter himself through an irrevocable letter of credit payable on demand. The importer therefore does not have to give a reason for cashing the letter of credit.

Performance-security insurance thus protects the exporter from an unjustified call of the letter of credit provided by a bank. In consortium insurance, each exporter belonging to a consortium can be protected against a rightful call of the letter of credit for nonperformance by one or more members of the export pool. Finally, surety-bond insurance protects companies providing performance bonds to eligible exporters under the EDC rules.

These programs led to the issuance of 19 contracts worth $45 million in exports in 1980.

Foreign-Investment Insurance

Investment insurance is intended to encourage Canadian firms to set up branch operations in foreign countries where this will lead to Canadian exports of goods, services, or technology. The approval of the host country is also necessary.

This insurance primarily applies to new investments but also to the development and modernization of existing facilities. It covers almost all the rights that an investor may acquire in a foreign firm, such as shares, loans, management contracts, licenses, and so on. Portfolio investments are not covered.

The duration is limited to 15 years, and coverage is 150 per cent of the initial investment plus retained earnings. The policy provides combined or individual coverage of the risks of inconvertibility of funds (0.3 per cent premium), expropriation (0.4 per cent premium), and war or revolution (0.3 per cent premium).

Investment-insurance policies in force in 1980 amounted to $140 million – a drop from a high of $167 million in 1978. The investments covered were primarily in developing countries, with Asia accounting for one-third of the total, Central and South America for about 40 per cent, Africa for 18 per cent, and European countries for less than 10 per cent.

In June 1981, the EDC announced that it would allow exporters to discount their insured export receivables with banks or other financial institutions of their choice. EDC insurance is thus assigned to a financial institution that enjoys the same protection as the initial beneficiary. On the other hand, the financial institution also assumes the same subsidiary risks as the exporter himself (10 per cent): it has no recourse against the exporter unless he loses his right for compensation. This right of assignment applies to short-term global policies. The cost of insurance remains the same, but the banker and the exporter agree directly on the cost of the discounting.

This new program facilitates the discounting of foreign claims without affecting the exporters' lines of credit.

Guarantees

In the same vein and to promote private-sector participation in export financing, the EDC offers guarantees that enable financial institutions to recover all of their invested funds in cases of default. These guarantees cover promissory notes, irrevocable letters of credit, and performance security. In 1980, guarantees were issued for 51 million dollars' worth of exports.

Insurance Premiums

The EDC has a firm policy of not divulging the price charged for its services, be they loans, as discussed later, or insurance contracts.

The documents published by the EDC reveal only that the average premium for all policies provided is less than 1 per cent and that premiums are, in fact, set on a case-by-case basis, depending on a large number of factors such as the type of goods, the country of destination, the terms of payment, and so on.

More detailed information, however, is available or can be uncovered with a little imagination. For example, we were informed that the average premium on loan pre-disbursement insurance varies between 0.5 and 1 per cent; that investment insurance costs 0.7 per cent on average; and that, in 1981, global policies cost approximately 0.33 per cent of their coverage value.

Since the total premiums collected annually by the EDC is known, as is the total value of the insured exports, an average cost can be calculated by relating the two. Table B-13 shows the results. The first estimate is based on the value of insured exports during a year; the second, on the value of insurance in force at 31 December. Since 80 per cent of the insurance policies are short-term, the first estimate appears more realistic than the second. On the basis of these calculations, the average cost of EDC insurance would have been 0.44 per cent in 1980 and 0.52 per cent in 1979. The annual average over the entire 1971-80 period is 0.40 per cent. When the premiums collected are related to the value of the insurance in force at the end of the year, the average cost rises considerably. In 1980, it was 0.76 per cent; in 1979, 0.78 per cent.[13]

For purposes of comparison, the insurance premiums in some other countries, as reported by the U.S. Eximbank for 1979, are: 0.85 per cent in France; 0.80 per cent in West Germany; 0.60 per cent in Britain; 0.50 per cent in Italy; and 0.30 per cent in Japan.

Growth in Operations

Since the new Export Development Corporation Act came into force in 1969, the EDC's operations have grown rapidly. In 1980, the corporation issued new policies totaling $2.7 billion; insurance in force at the end of that year was $1.7 billion (Table B-4). The annual growth rates have varied widely, but insurance in force has generally risen by approximately 14 per cent a year, while insured exports have grown slightly more rapidly.

This volume of business is quite modest, compared with similar operations in the major industrialized countries. For insurance in force, it is equivalent to approximately 10 per cent that in Italy and to 5 per cent or less that in the other countries. If it is recalled that Canada's total exports amounted to $74 billion in 1980, the 2.7 billion dollars' worth of new insurance policies issued that year obviously represented only a small fraction – 3.6 per cent. Since exports to the United States are usually not insured,[14] however, they can be excluded from the calculations, thus placing EDC operations at 8.5 per cent of Canadian exports.

It should also be kept in mind that the Canadian insurance system is optional, that the types of commodities exported differ from one country to another, and that the risks involved and covered are not always the same.

Table B-5 shows the distribution of the value of insured exports by region of destination for the 1969-80 period. Table 2-4 summarizes the situation in 1980 and also includes the export coverage ratios for each region.

Table 2-4

Distribution of Exports and EDC Insurance Coverage, by Region of Destination, 1980

	Total exports	Exports insured by the EDC	Rate of insurance coverage[1]
		(Per cent)	
United States	63.1	10.8	0.8
Mexico	0.7	2.3	12.8
Western Europe	14.9	42.3	10.3
Eastern Europe	2.9	1.7	2.2
Africa	1.4	10.7	27.3
Asia	10.0	9.8	3.5
Middle East	1.5	6.3	15.2
Central America and Caribbean	1.4	4.5	11.6
South America	3.0	6.2	7.4
Oceania	1.1	5.4	18.4
All destinations	100.0	100.0	3.6
		($ Billions)	
Total value	74.3	2.7	

1 EDC-insured exports as a proportion of total exports in Canadian dollars.

SOURCE Statistics Canada, *Summary of External Trade: December 1981*, cat. no. 65-001, for total exports; Table B-5 for insurance issued by the EDC.

European countries absorbed almost half of EDC-insured exports in 1980, but only about 10 per cent of all Canadian exports to Europe were insured. The insured proportion of total exports reached its highest level for Africa, but it was still less than 30 per cent. Insurance covered only about 15 per cent of exports to the other regions of the world. Such a low rate of coverage for markets of this type is surprising, and we find that the reasons given above are unconvincing. Finally, it should be noted that the distribution of insured exports by destination has been remarkably stable since 1969. The only significant changes are an increase from 4 to 10 per cent for Africa and a decrease from 15 to 8 per cent for Latin America between the beginning and the end of the period.

The distribution of insured exports by category of products is shown in Table B-6.

Approximately half of the EDC's insurance activities involve forest products and the minerals, metals, and chemical products group. The coverage ratios are very unequal, when the relative importance of the products exported is taken into account. The minerals, metals, and chemical products group, which accounts for 35 per cent of all Canadian exports, has a very low insurance coverage of about 3 per cent, while half of all exports of industrial and agricultural machinery are insured. Aside from certain significant temporary variations, and perhaps a small drop in agricultural products, we find no clear upward or downward trend in the relative weights of the various categories of products in terms of EDC insurance.

In view of the EDC's industrial strategy, one is surprised to note, however, that forest, agricultural, and textile products usually accounted for more than 60 per cent of EDC-insured exports over the 1969-80 period.

Statistical Appendix B contains two other tables (Tables B-7 and B-8) showing the claims paid out, recovered, or outstanding, and the distribution of insurance policies by value of exports.

On this last point, it is noteworthy that, in Table B-8, policies covering fairly small transactions are steadily losing ground to policies covering larger transactions. Inflation is undoubtedly responsible in part for this change, but the numbers are also increasing.

Let us add one final point: at 31 December 1980, the EDC had 1,178 policies in force, of which 819 (70 per cent) were short-term global policies and the others were medium-term policies covering specific sales. If the value of insured exports per policy is increasing, and if 70 per cent of this insurance is in the form of global policies, there is good reason to suspect that the main beneficiaries of the EDC programs are large firms rather than small businesses.

This last observation should be viewed in the context of the comments on the type of exports that are insured – i.e., on the fairly high concentration in traditional products, such as forest products or textiles. In these two respects, the industrial-policy objectives of the EDC and Parliament do not appear to be achieved. Would it be possible or desirable for the EDC to adopt a more selective and discriminating policy and to refuse to insure some firms or some categories of exportable products in order to meet its assigned objectives more closely? We believe that such an approach would lack realism and balance, since it would very probably jeopardize other objectives, such as increasing total exports and employment. In any event, an assessment of this type should be conducted in light of all relevant circumstances. We shall return to this point in Chapter 5.

EDC Loans

Principal Terms of Financing

The EDC's main activity is the provision of direct loans to foreign purchasers of products with high Canadian content. The corporation leaves short- and medium-term financing to the private sector and focuses its activities on loans with terms of more than five years.[15] Unlike commercial bank loans, EDC credit is granted at fixed rates for the entire duration of the loan.

Previously restricted to goods, EDC credit now extends to sales of consulting, engineering, and management services, the cost of feasibility studies, and other similar services, provided the resulting orders of Canadian services are expected to generate benefits for Canada (although this is not strictly required for granting the loan).

In June 1981, the EDC announced the introduction of a new financial instrument, known as "forfaitage," by which the corporation acquires promissory notes issued by a foreign purchaser to a Canadian exporter. The exporter is thus selling on credit but recovers the product of his sale by discounting the notes to the EDC. The EDC requires a guarantee from the purchaser's bank and charges a discount and various commissions to the exporter. The latter may obtain compensation from the purchaser through the interest that he sets.

This procedure has numerous benefits for the exporter. He can provide supplier credit to his customers without reducing his cash flow; he automatically avoids the risk of fluctuating interest or exchange rates, and he also obtains automatic insurance for political risks or recovery of the notes.

A new aspect of this program that deserves special mention is the maturity of the loans, which ranges from two to five years. This signals the EDC's entry into the field of medium-term credit, previously reserved for the banks.[16]

Lines of credit are another – long-term – method of financing. The EDC provides and signs "framework agreements" with some foreign countries to indicate to Canadian exporters that credit is available and that foreign purchasers have requirements and are prepared to conduct business with Canada. Some of these credit openings are very large, and they are not always used to the extent anticipated.

In 1981, the government announced that over the next three years it would devote $300 million a year to export subsidies through "crédit mixte." These special funds are limited to specific projects where it is shown that foreign competitors also have access to "crédit mixte."

In view of the active competition waged by foreign government agencies, the EDC generally lends at fixed rates and often below market rates – in other words, at rates and under terms that banks could never provide. In this respect, Sylvain Cloutier, the current president of the EDC, recently stated:

> EDC, by virtue of being in the fixed rate lending business, takes a very significant financial risk beyond that acceptable to commercial banks.[17]

For the most part, Canadian exporters must incur financing and service charges in order to make up the difference between the rate at which the EDC lends to foreign purchasers and the minimum rate that it requires for itself.[18] Exporters must therefore trim down their profits accordingly or increase their selling price at what they often consider to be the wrong time.

The EDC also wishes to promote participation by the private sector in its long-term operations. To achieve this, the corporation generally does not finance down-payments (15 per cent); and, whenever possible, it tries to finance only 70 per cent of the balance, leaving the remaining 30 per cent to private institutions. With only a few exceptions, the EDC does not finance local construction costs.

However, banks lend at floating rates (a margin of about 1 per cent above the Canadian prime rate or the interbank rate on the London market) and take a LIFO (last in, first out) position in their loans. In other words, banks always take the shortest terms.

Specifically, there are three ways in which banks can participate in EDC loans: direct participation, with or without recourse against the EDC; joint lending, with or without the EDC's financial guarantee; and parallel lending, based on separate arrangements, with or without guarantees.

Most often, the banks prefer to be involved in the negotiations and to retain some recourse. In this respect, they complain of often being kept outside the decision-making process.

Finally, the EDC gives banks and financial institutions total guarantees when they are willing to forgo their recourse against the exporter. In 1979, two guarantees for a total of $164 million in exports were granted; in 1980, none were granted.

Lending Operations

As we have seen, the EDC often obtains bank participation in the loans that it approves. In the data cited below, the value of loans includes these bank contributions. Aside from this direct financing, the EDC may guarantee loans extended by the banks; these guarantees are also included in our analysis. Finally, we note that the EDC acts on its own behalf or as an agent for the federal government. The overall data cover both categories of transactions.

At 31 December 1980, the EDC's total outstanding loans amounted to $4.3 billion (Table B-9). That amount has grown steadily and swiftly since 1969 – at a rate of some 30 per cent a year. Of the loans outstanding, no more than $250 million was provided by the banks. Loans outstanding at 31 December include not only the loans receivable appearing on the balance sheet but also the guarantees provided by the EDC to other lenders. At the end of 1980, these guarantees amounted to $230 million, including the government share – only 5 per cent of the total outstanding.

The amounts of the loans authorized each year are much more variable and do not have the same significance, since the actual disbursements are spread over three years, on average. Furthermore, these authorizations include lines of credit provided to foreign governments. In some cases – the most important being Algeria in 1978 – these lines of credit are not used; we shall return to this point. Following the difficulties that occurred in 1980 in the capital and exchange markets, there was a sharp drop in the EDC's volume of business: $930 million in new loan commitments, compared with $2 billion in 1979.

The banking sector contributed approximately $77 million to that amount – a sharp drop from the $624 million recorded in 1979. The difficulties experienced by financial markets were obviously compounded by the increased competitive pressure caused by the policies based on preferential interest rates that were offered by foreign governments.

Table B-10 shows loan disbursements and repayments, as well as the net capital flows. In 1980, the EDC disbursed $959 million on its own behalf and on behalf of the government, and received $263 million in repayments, thus showing a net disbursement of $696 million. For those who are interested primarily in actual financial contributions, it is this amount of $700 million that best measures the EDC's volume of business in direct export credits. We have seen that net disbursements also serve as a criterion for the OECD's analysis of capital flows to the developing countries.

Following increases of about 30 per cent a year in the early 1970s, gross disbursements later tended to increase at a much slower rate, with fairly large annual fluctuations. In 1977 and 1979, the increases exceeded 35 per cent, but they were negligible in the two following years. On the other hand, repayments seemed to increase steadily and swiftly, which enabled the EDC to maintain its operations at a higher level without turning to the market.

Figures on annual loan disbursements by region or country of destination are not available, but the distribution of loan approvals is known. It is interesting to note that 40 per cent of loan approvals in 1980 were destined for developed countries, with the remainder being aimed at the developing nations. The United States, for example, received $233 million in loan authorizations – 24 per cent of the total. This first finding is surprising in the light of the EDC's market-diversification objective, which Parliament has often reaffirmed. The figures in Table 2-5 provide some qualifications to this result, but it can nonetheless be seen that, over the entire 1969-80 period, the developed countries received one-third of the EDC's loans and that this proportion exceeded 50 per cent between 1977 and 1979.[19]

Table 2-5

Share of EDC Loans Approved for Exports to the United States and Europe, 1969-80

	Share
	(Per cent)
1969	26.8
1970	29.0
1971	50.5
1972	26.6
1973	18.1
1974	10.8
1975	8.6
1976	27.2
1977	48.9
1978	44.0
1979	70.4
1980	39.0
Average	33.3

SOURCE Table B-11.

The eastern European countries appear to have been the EDC's steadiest customers over the years. Since 1969, these countries have received an average of 16 per cent of the credits authorized. Since exports to eastern Europe represent only about 2 per cent of all Canadian exports, one can conclude that EDC financing has helped to reorient exports. Similarly, although Canada generally exports little to Africa, the EDC devotes approximately 15 per cent of its resources to that continent. The proportion of exports financed in each region in 1980 is shown in Table 2-6. Given the relative importance of trade with each of the regions examined, it is apparent that the EDC focused its loan activities in Africa, as just stated, then in Central and South America. In 1980, unlike in previous years, there was no concentration in eastern European countries.

Table 2-6

Share of Canadian Exports Financed by EDC Loans, by Region of Destination, 1980[1]

	Share
	(Per cent)
United States	0.5
Western Europe	1.0
Eastern Europe	1.7
Africa	13.6
Asia	2.0
Middle East	3.0
Central America	8.3
South America	4.8
Oceania	1.0
All destinations	1.3
	($ Millions)
Value of EDC-financed exports	928

1 Loans cover goods and services.
SOURCE Tables B-9 and B-11.

Table B-12 gives the distribution, by recipient country, of EDC loans for the entire 1961-80 period. On the disbursement side, Mexico is the major recipient, followed very closely by the United States. They are followed in turn by Algeria, the Soviet Union, Indonesia, Czechoslovakia, Turkey, and Romania. The figures on loan authorizations produce a somewhat different ranking, especially for Algeria and Romania. In 1978, the EDC opened a line of credit exceeding $1 billion with Algeria, but only $112 million was used in 1979 and 1980. When other loan agreements are taken into account, Algeria could have used $2 billion over the period, but in fact it used only $282 million in disbursed loans, so that the balance available at the end of 1980 amounted to $1.7 billion. In all, since 1961 the EDC has signed loan agreements for $8.6 billion, disbursed $4.9 billion, and received $1.3 billion in repayments. The largest amount approved so far in a single line-of-credit agreement involves China, for more than $2 billion.

Table 2-7 shows the distribution of authorized loans in 1980, by product or service category. One-third of authorized loans cover general manufactured products – the largest product category, which is also, unfortunately, poorly defined. The second largest category is shipbuilding, with 22 per cent of authorizations (approximately $200 million). Exporters of aircraft, transportation equipment, and electronic equipment each receive 12 per cent of the loans, while the three other categories appearing in the table share the rest.

Table 2-7

Value and Share of Total Value of Loans Approved by the EDC, by Product Category, 1980

	Value	Share
	($ Millions)	(Per cent)
General manufacturing	306.1	33.0
Shipbuilding	204.4	22.0
Aircraft	117.6	12.7
Transportation equipment	114.8	12.4
Electronic equipment	107.2	11.5
Iron and steel products	38.9	4.2
Electrical equipment	27.7	3.0
Services	11.9	1.3
Total	928.7	100.0

SOURCE EDC, *Annual Report 1980*, p. 56.

While the lack of detail about "general manufacturing" calls for caution, the distribution of EDC loans appears to indicate a fairly different – and basically favourable – orientation of Canada's existing manufacturing structure. Because of the lack of comparable data for other years, it is impossible to determine whether 1980 is representative of a longer period.

Terms

The terms of EDC loans have not been reported in the last few years. The lack of more recent information forces us to use 1976 data (see Raynauld, 1979).

The term of a loan is not as simple a concept as may first appear. A fairly thorough knowledge of practices and procedures is necessary to correctly measure it.

The first stage is the authorization process that leads to the signing of a loan agreement between a foreign borrower and the EDC. This agreement, or related documents, will involve the Canadian exporter and, if applicable, a Canadian bank that may make a joint, parallel, or participatory contribution to the loan. It should be stressed that a loan approval is a separate decision from a loan disbursement. Disbursement – the second stage in the process – occurs two or three years after approval. The capital is generally disbursed in several instalments, not to the borrower but to the Canadian exporter, depending on the progress of his production or work. To determine the real or actual term of a loan, the initial date of the use of the loan is an average of the dates on which the disbursements are made. The third stage is repayment, which is also spread out over time. In general, a loan agreement stipulates that repayment will occur in two instalments per year over a certain period, with the payments being equal and including both capital and interest. The announced term, which may be called the "nominal term," is the number of years allowed for repayment. The EDC states that it approves a ten-year loan when the planned period for repayment is ten years. But since repayment is not made in a single and final payment at the end of the period but in a series of instalments, it is obvious that the effective term (the actual length of use of the funds) is only half the nominal term. A final complication arises from the fact that repayments do not begin six months or a year after the loan is disbursed, but from the date on which the work is completed and deliveries are made. This practice is based on the rule of project self-financing. Consequently, repayment begins once the project itself has begun to earn income. Between the first disbursement and the first repayment, the borrower therefore uses the funds during an additional period of time that is not reflected in the calculation of the nominal term. This period is known as the "period of grace."

Based on the data available to us when we prepared our calculations, the EDC approved 46 loans in 1976, for a value of $784 million (Table 2-8). Of this total, 22 loans had a nominal term of ten years; 11 had maturities of eight or nine years; and 12 had maturities of five to seven and a half years. One loan had a four-year term. The average nominal term, weighted by the value of the loans, was 9.43 years.

Table 2-8

Distribution of EDC Loans, by Length of Nominal Term, 1976

	Number	Value	Share of total value
		($ Millions)	(Per cent)
10 years	22	604.4	77.0
8 and 9 years	11	133.3	17.0
5 to 7½ years	12	45.0	5.7
4 years	1	1.6	0.2
Total	46	784.3	100.0

SOURCE EDC, *Annual Report 1976*.

Given the foregoing general observations, at least two adjustments must be made to the average nominal term to bring it closer to the real term. First, the nominal term must be shortened to take into account the fact that loans approved in 1976 were not paid out in 1976. Calculations based on the data in Table 2-9 indicate that the average period anticipated for disbursement of the loans approved in 1976 was 3.08 years. The second adjustment goes in the opposite direction: the nominal term must be extended to include the period of grace, during which the funds are being used but repayment has not begun. On average, for loans approved in 1976, the anticipated period of grace is 3.26 years. Therefore, the average real term is 9.61 years (9.43 – 3.08 + 3.26). We could also add that, from both the lender's and the borrower's points of view, the funds are actually used during only half that period, as explained above.[20]

Table 2-9

Anticipated Schedule for Disbursement and Repayment of EDC Loans Approved in 1976, 1976-81

	Disbursement		Repayment	
	($ Millions)	(Per cent)	($ Millions)	(Per cent)
1976	111.0	14.2	19.5	2.5
1977	274.0	34.9	24.3	3.0
1978	162.0	20.7	106.7	13.6
1979	105.0	13.4	291.1	37.1
1980	132.0[1]	16.8	263.7	33.6
1981		79.0	79.0	10.0
Total	784.0	100.0	784.0	100.0

[1] Combined total for 1980 and 1981.

SOURCE Raynauld (1979), p. 64.

It is therefore true that the EDC operates in the long-term lending market. That may change in the future if forfaitage with nominal terms of two to five years, which was introduced in 1981, becomes more widespread.

Interest Rates

A major issue, if not the central question, in a study such as this is the rate of interest on export financing. What interest rates are charged to borrowers and what related costs are imposed on exporters? How does this price policy compare with market conditions? What is the implicit subsidy, if any? Finally, are those interest rates competitive internationally?

As the financial and social opportunity costs of EDC operations are discussed in Chapter 4, we do not formally approach the problem of subsidization here. However, the international scene is highly relevant to the subject of interest rates.

Given the current competitive environment, it is impossible to completely escape the rules and practices followed elsewhere. For this reason, there has long been great interest in international consultations, negotiations, and agreements on the costs of export financing.

The present arrangements (1982) were agreed upon following a "consensus understanding" adopted in June 1976 by 18 major creditor countries. This initial agreement set the guiding principles for all financing operations, such as the down-payment required, the minimum interest rate (7.5 per cent), the terms, and the "crédit mixte." It was renewed on 1 April 1978 (with 22 participating countries) and amended on 1 July 1980, following innumerable disputes, primarily between the United States and France. A new agreement took effect in October 1981 and was revised in July 1982.

Table 2-10 gives the interest rates prescribed for 1982. The lowest rates are now 10 per cent – 2.5 percentage points higher than the previous rates. A minimum rate of 9.25 per cent is allowed in countries where domestic interest rates are lower than the prescribed rates.

Several countries, particularly the United States and Canada, have found the prescribed rates much too low in the past, given market conditions. To offset these low rates, Canada sought to obtain longer maximum terms. While this attempt was unsuccessful, it appears that Canada is continuing its earlier practice of providing longer terms, in contravention of the terms of the agreement. The assessment made by a British analyst in 1980 provides amusing reading:

> Outright derogations have been rare... The main delinquent has been Canada... To remain competitive, Canada has . . . compensated for a high interest rate by offering a repayment term longer than that allowed by the guidelines.[21]

When several countries, such as France, adopt the minimum rate as a regular rate and when the minimum rate is lower than market levels, Canada must choose between maintaining higher rates and seriously jeopardizing its markets, on the one hand, and keeping its rate at the minimum level in order to meet the competition, on the other; if it elects to do the latter, it must dip into the public treasury to subsidize its exports. If the recent turnaround in market rates continues for some time and improves, this situation could improve as well.

Table 2-10

Minimum Interest Rates and Maximum Terms for Public Export Financing as Determined in OECD "Consensus Understanding," July 1982

	Interest rate		Maximum term allowed
	Term of 2-5 years	Term over 5 years[1]	
	(Per cent)		
High-income countries[2]	12.15	12.40	5-8½ years
Middle-income countries[3]	10.85	11.35	8½ years
Low-income countries[4]	10.00	10.00	10 years

1 Partners must be advised for terms exceeding five years.
2 Includes OECD member countries except Greece, Portugal, Spain, and Turkey, plus the wealthiest petroleum-exporting countries.
3 Includes the remaining OECD member countries plus eastern European countries.
4 All other countries.
SOURCE Based on data provided by the OECD.

In 1978, the OECD commissioned a study on export-credit interest rates. The report prepared by Alex Wallen (1980), of Sweden, proposes two solutions. The first is known as the "uniform moving matrix," which would maintain identical interest rates for all creditor countries but would permit periodic adjustments based on the weighted average of market rates. As in the current system, this approach would involve subsidization in those countries where market rates exceed the average, but the variations would be much smaller since the export credit rates would, to some extent, be indexed. The second option is a system of differentiated interest rates, based on the value of currencies and tied to the market interest rates in the countries in question. The EDC circulated a table (see Table B-14) giving the interest rates that each country would have used in export credits if this system had been in force between 1976 and 1980. The EDC supported this recommendation of the Wallen report.

The theory of arbitrage shows that differences in interest rates are precisely offset by the fluctuations expected in the rates of exchange. As a result, the borrowers pay less interest in currencies that are expected to appreciate and more interest in depreciating currencies. Operations in the forward market ensure that one margin offsets the other. For longer terms, however, the exchange risk is not covered. It is therefore difficult to determine *a priori* how agents would react to such a system. Table B-14, for example, indicates that, at 1 January 1980, the interest rate would have been 10.5 per cent in Canadian dollars and 9 per cent in U.S. dollars. Would a borrower have preferred the certainty of a lower interest rate in U.S. dollars, combined with the risk of appreciation, or would he have gambled on a fall in the Canadian dollar?

Notwithstanding these reform proposals, the fact is that the current arrangement has enabled some countries, such as France and the United Kingdom, to take advantage of the approved minimum rate, while their borrowing cost was much higher. This has resulted in systematic export subsidization – a practice that has been considered by other countries as unfair competition.[22] Pearce (1980) reports that the financial cost of export subsidies in Britain was 200 million pounds (in 1979 terms) a year or C$500 million (p. 59); in France, it amounted to 5.5 billion francs or C$1.4 billion in 1978 (p. 31).[23] In 1980, the cost of subsidies would have reached a total of US$6 billion for all participants to the OECD agreement.

Let us now turn to actual interest rates. Unlike all other countries that announce and publish their rates on export credits, the EDC treats its interest policy as a state secret. Even after the fact, it does not publish statistical or historical information. This case is probably unique in the world. Although Canada's chartered banks are required by legislation going back to the last century to publish such details on a weekly basis, the EDC has established the detestable and unacceptable tradition of keeping this basic information confidential.

The U.S. Eximbank does, however, periodically publish analyses of export-financing conditions in the world, and Canada is included, along with several other countries. Table 2-11 summarizes the interest rate situation prevailing in March 1977 and in the first half of 1979. The data are based on the concept of cost to the borrower, since considerations other than the interest rate charged by the government agency are involved, such as the proportion of exports that is financed at this rate, the insurance premiums, and other charges that may be compulsory. Because practices differ from country to country, it was

Table 2-11

Interest Rates on Long-Term Credit for Export Assistance, Selected Countries, March 1977 and 1 September 1979

	Government credit rate	Proportion of public participation	Market rate	Proportion of private participation	Other charges	Total cost	
						1977	1979[1]
			(Per cent)				
Canada	8.5	60	10.25[2]	25	0.2	9.2	
Britain	8.0	85	0	0	0.9	8.9	8.30
France	7.5[3]	60	–	25	0.7	8.2	8.55
West Germany	8.0	45	7.50[4]	10 to 30	0.8	8.6	8.40
Japan	7.5	50	9.20	30	0.5	8.6	8.00
United States	8.4	42	7.75[2]	43	0.2	8.3	9.30

[1] Cost for low-income countries.
[2] Prime rate plus 1.5 per cent.
[3] The combined public and private rate is always the minimum level set by international agreement.
[4] Prime rate plus 1.25 per cent.
SOURCE United States, Export-Import Bank, *Annual Report 1977*, and *Annual Report 1980* (Washington); see also Pearce (1980), p. 56.

deemed preferable to include all of these factors in the calculations.

In March 1977, according to the U.S. Eximbank, the EDC charged 8.5 per cent interest on its direct loans. The corporation's loans usually amounted to 60 per cent of the value of the sale, while bank contributions could account for an additional 25 per cent. The interest on the bank loans was 10.25 per cent, or 1.5 percentage point above the prime rate at the time. Thus the combined interest rate was 9 per cent, to which can be added estimated charges of 0.2 per cent. The borrower therefore paid 9.2 per cent. In Britain, the Export Credits Guarantee Department (ECGD) guaranteed a fixed rate of 8 per cent on bank credit up to 85 per cent of the value of the sale. On the other hand, as insurance was compulsory, the borrower had to add the premium to the charges, for a total cost of 8.9 per cent. In France, the proportions of government and private credit were unimportant to the borrower, since the cost of credit was set for the total amount at the minimum rate allowed by the OECD agreement.

Based on these calculations, Canada in 1977 had the highest credit cost of all the countries examined. For more recent years, unfortunately, one can do no more than guess. One confidential study reports a cost to the borrower of 8.81 per cent in early 1979 – a figure that we find rather low. Another author suggests a rate of 10.5 per cent for so-called "typical" export credit in November 1979. The fact is that the EDC began in 1976 to go to the market for funds rather than rely exclusively on the government. In 1978, all of the net new funds it raised were in U.S. dollars (see Table 2-14). Since its borrowing costs could then have been less than interest rates in Canada, the EDC was able to lend at lower rates as well. Furthermore, Table 2-11 reveals the importance of bank financing in determining the total interest cost. With the recent rise in rates, the banks have experienced increasing difficulty in contributing financially to the corporation's lending activities.[24] On the positive side, this has effectively reduced the cost of credit to borrowers.

Another very indirect way of estimating the EDC's interest charges is to compare its revenue from loan activities with the value of the loans – an approach based on the concept of return on assets. The drawback of this method is that it fails to identify who is paying. As we have already seen, in addition to the formal interest rate indicated in the loan agreements, the EDC adds service costs or fees, part of which are charged to the borrower and part to the exporter.[25] These costs vary substantially from one transaction to another and are subject to hard-nosed bargaining.

Table 2-12 gives two independent and noncomparable estimates of the return on EDC loans. The first involves loans approved during the year and includes interest as well as all related charges. The return rose from 8.7 per cent in 1974 to 9.6 per cent in 1979.[26] The second relates revenue for the year to the loans receivable as of the end of the year. This revenue is therefore related to the cumulative approvals that were made in previous years and are still outstanding. The rate of return calculated in this manner rose from 7.1 per cent in 1974 to 8.8 per cent in 1980.

Because these rates are established *ex post*, they obviously do not reflect current administrative methods. The decisions are made in the following manner. At any given moment, the EDC knows the average

Table 2-12

Estimated Gross Return on EDC Loans, 1974-80

	Loans approved during the year	Loans outstanding
	(Per cent)	
1974	8.7	7.1
1975	8.7	7.5
1976	8.8	7.8
1977	8.6	8.0
1978	9.1	8.5
1979	9.6	8.6
1980		8.8

SOURCE Canada, Department of Industry, Trade and Commerce (1980); and Table D-5, first line.

financial cost of its funds, including equity (for which the financial cost is nil). On the basis of this purchasing cost, the Board of Directors sets a schedule (based on currencies) of the minimum returns to be obtained on new loans. In 1980, this return target was set at 0.5 per cent above the borrowing cost of capital; it was 9 per cent in Canadian funds and 8.5 per cent in U.S. currency. The EDC's target has not followed the rise in borrowing costs since the beginning of 1979 because the corporation believed that it could not lend money at higher rates. In fact, as shown above, approved loans dropped sharply in 1980 from the preceding year. These minimum rates are used as lower limits for the terms that the EDC may offer, but negotiators are instructed to obtain higher rates if conditions permit. This explains the service and other charges that are often assessed to the exporter.

The effective rates of return in Table 2-12 are used to estimate the implicit subsidies granted to exporters. We shall return to this topic in Chapter 4.

An essential feature of the EDC's interest rates is the fact that they are fixed for the entire term of the loan. Commercial banks, on the other hand, lend on shorter terms and use floating interest rates in order to retain their profit margin at all times, without having to borrow for maturities as long as those of their loans.

The EDC's Financial Structure

The Balance Sheet

As a full-fledged Crown corporation, responsible for insuring and financing Canadian exports, the EDC is a financial institution with a balance sheet that shows assets composed primarily of loans and investments. At 31 December 1980, its total assets amounted to $3.8 billion, and its loans receivable to $3.2 billion, after deducting bank participation in these loans. Short-term investments totaled $465 million; they were roughly offset, on the liability side, by short-term borrowing of approximately the same size (Table 2-13).

Table 2-13

EDC Balance Sheet, 31 December 1980

	($ Millions)
Assets	
Loans receivable	3,426.6
Less participation by other lenders	254.3
Subtotal	3,172.3
Accrued interest and fees (receivable)	79.3
Allowance for losses on loans	33.0
Investments	
Cash and short-term investments	465.5
Canada bonds	25.5
Accrued interest	13.9
Other assets	
Discount and issue expenses paid in advance	15.7
Miscellaneous	6.5
Total assets	**3,778.7**
Liabilities	
Loans payable	
Long-term	2,611.5
Short-term	462.7
Accrued interest (payable)	114.1
Other liabilities	
Accounts payable	1.9
Loan-related deferred charges	36.3
Insurance-related deferred charges	7.5
Canada Account	5.4
Other	8.8
Allowance for insurance claims	6.8
Allowance for losses on loans	33.0
Shareholder's equity	
Capital	310.0
Retained earnings	180.8
Total liabilities	**3,778.7**

SOURCE Based on EDC, *Annual Report 1980*, p. 27.

Of the loans receivable, 43 per cent were due in 1986 or later, and about 10 per cent were to expire annually between 1980 and 1986: $250 million in 1981 and almost $400 million each year from 1982 to 1985. A sum of $26 million represented loans overdue by more than a year, with capital and interest included, but excluding mutually agreed rescheduling and other refinancing procedures. In 1980, the EDC agreed to reschedule repayments for a sum of $70 million.

Loans are granted primarily to foreign governments or their agencies. Of the $3.2 billion in loans outstanding in 1980, $2,265 million (71.4 per cent) was owed by public agencies and $907 million (28.6 per cent) by private firms.

Let us now turn to the EDC's liabilities. Since the corporation is fully owned by government, its share capital consists of subscriptions by the federal government, which totaled $310 million at 31 December 1980. In addition to this investment, retained earnings amounted to $181 million, keeping in mind that the corporation has never paid a dividend to its shareholder. Total equity was therefore close to $500 million. The EDC's second major source of funds is long-term borrowing, which amounted to $2,612 million at the end of 1980. This debt was distributed as follows: $658 million owed to the government of Canada; $1,525 million payable in foreign currencies; and the remainder – approximately $450 million – obtained in Canadian financial markets. When the equity and borrowing obtained from the federal government are added, it can be seen that the EDC on its own behalf had invested almost $1.2 billion in government funds in its operations, not counting short-term operations or EDC transactions on behalf of the government.

Let us examine in greater detail the sources of EDC financing and how they have changed over time.

Sources of Financing

Originally, the EDC met all of its financing needs through the federal treasury. In 1972, it began to issue short-term paper on the Canadian money market; and, in 1979, it turned to the U.S. markets. For long-term financing, it resorted to the capital market for the first time in 1976, with an issue of $150 million. In 1977, it issued new bonds for approximately $320 million, this time on the European market. Today, most of its long-term borrowing outstanding is payable in foreign currencies and thus represents financing of foreign origin.

Table 2-14, which is a reconstruction of the EDC accounts, shows the federal government's contribution to the corporation's equity and borrowing, as well as the contributions of both the domestic and foreign markets.

Disregarding short-term transactions, which are byproducts, the resources available to the EDC amounted to $3.1 billion in 1980. The market provided two-thirds of this sum, with the federal government accounting for the remaining third. Half of the total was obtained in foreign markets. As the table shows, the federal government's contributions leveled off between 1976 and 1979 and dropped slightly in 1980. It is ironic to note that, while EDC borrowing from the federal treasury ceased in 1977 (with a final loan of $150 million, of which $115 million was used for a repayment), the EDC nevertheless obtained supplementary commitments in the form of share capital in 1978 and 1979. The government stopped lending money, but it still provided funds. Since there was no increase in share capital in 1980, however, the government's total contribution began to decrease as the EDC repayed federal loans that had matured.

Loans obtained on the market have grown at a very rapid rate in recent years. In foreign markets, the outstanding debt rose from $280 million in 1977 to $1.5 billion in 1980. The president of the EDC has stated that foreign borrowing amounted to $626 million in 1980 alone.[27] Given repayment requirements (and variations in the exchange rate), the outstanding debt actually increased by $578 million,

Table 2-14

EDC Long-Term Financing Outstanding at 31 December, by Source of Funds, 1970-80

				Other borrowing		
	Shareholder's equity	Government loans[1]	Total government contribution	Foreign currency	Canadian currency[2]	Long-term financing
			($ Millions)			
1970	37.8	294.9	332.7	–	–	332.7
1971	50.3	377.8	428.1	–	–	428.1
1972	57.0	452.4	509.4	–	–	509.4
1973	74.3	572.0	646.3	–	–	646.3
1974	82.7	724.5	807.2	–	–	807.2
1975	123.1	971.5	1,094.6	–	–	1,094.6
1976	159.4	1,044.5	1,203.9	–	115.5	1,319.4
1977	201.3	1,084.8	1,286.1	280.4	155.1	1,721.6
1978	333.0	944.6	1,277.6	499.3	254.8	2,031.7
1979	460.2	811.4	1,271.6	947.2	376.9	2,595.7
1980	490.8	657.9	1,148.7	1,525.4	445.8	3,119.9

1 Includes accrued interest payable, except in 1976-78.

2 Calculated as the difference between total nongovernment borrowing and foreign-currency borrowing, as given in EDC annual reports.

SOURCE Table D-1.

as can be calculated from the data in Table 2-14. Finally, the compound growth rate of total EDC resources has exceeded 25 per cent annually since 1973.

The notes to the EDC's financial statements provide details on the balances in foreign currencies at 31 December. On the liability side, the total balance was C$1,921 million in 1980 – an amount that represented the long-term borrowing just mentioned, plus short-term borrowing ($322 million) and accrued interest ($74 million). On the asset side, loans receivable in foreign currencies totaled $1,401 million, which means that almost half of the EDC's export credits were quoted in foreign currencies, primarily U.S. dollars. When short-term investments, accrued interest, and forward exchange contracts are added up, the total assets in foreign currencies in 1980 were roughly equal to liabilities, at $1,934 million.

The Income and Expenditure Account

The EDC's income and expenditure account is simple, and the data are presented in a way that provides a balance for each of the corporation's three major activities (Table 2-15). Revenues and expenditures are primarily inflows and outflows of interest, since the EDC's function is to act as a financial intermediary. Under "loans and guarantees" can be found revenues of $258.8 million and expenditures of $248.5 million in 1980, leaving a surplus of $10.3 million. The insurance business, in turn, produced inflows of premiums of $11.5 million, with $4.1 million set aside for losses. Short-term investments, which are a support operation, produced a surplus almost three times greater than that for export loans at $29 million. Finally, administrative expenses amounted to $16 million. The net income was almost $31 million – a drop of about $12 million from the preceding year.

Without jumping ahead to the more detailed analyses that follow, it is interesting to note here that the EDC has always earned profits, as illustrated in Table D-1. As a ratio on equity at the end of the year, these profits represented a return of 8.9 per cent annually during the 1970s.

Despite the length of this chapter, EDC operations have been described in broad strokes only, giving the impression of a dynamic Crown corporation whose business has grown rapidly in new and very competitive markets. The insurance and loan programs are numerous, flexible, and relatively well adapted to circumstances both in Canada and abroad.

Table 2-15

EDC Statement of Income and Expenditure, 31 December 1980

	($ Millions)
Income	
Loans and guarantees:	
Interest earned	250.4
Fees earned	8.4
Insurance and guarantees:	
Premiums and other	11.5
Investments:	
Interest earned	77.6
Total income	347.9
Expenditure	
Loans and guarantees:	
Interest earned	242.5
Provision for losses	5.9
Insurance and guarantees:	
Provision for claims	4.1
Investments:	
Interest earned	48.7
Administrative expenses	16.0
Total expenditures	317.3
Net income	30.6
Retained earnings at beginning of year	150.2
Retained earnings at end of year	180.8

SOURCE Based on EDC, *Annual Report 1980*, p. 28; and Tables A-1 and A-2.

To meet this task, however, the EDC has required more than $3 billion over the years, of which $1.2 billion was public money as of the end of 1980 and almost $2 billion had been borrowed on both foreign and Canadian markets. Those amounts of financial resources devoted to export financing would, in themselves, be a compelling reason for conducting as accurate an assessment as possible.

Other Export-Financing Programs

The EDC is not the only government agency in Canada in the field of export financing. The governments of Quebec and Ontario have both created business-financing corporations; while these are not primarily export-oriented, they do have explicit programs in this area. At the federal level, two other major sources of export financing warrant examination – namely, the Canadian International Development Agency (CIDA) and the Canadian Wheat Board (CWB). While these two agencies are not financial institutions in a strict sense, their financing activities clearly do promote Canadian exports.

Quebec's "Société de développement industriel"

Quebec's export assistance program was introduced by the Société de développement industriel (SDI) in fiscal year 1975-76. By 31 March 1981, the

SDI had devoted $115 million to that program since its inception; $87 million was in the form of grants, and $27 million in the form of direct loans or guarantees. In 1980-81 alone, loans and grants approved amounted to $33 million (Table 2-16). This program is therefore quite modest.

Table 2-16

Loans Approved by SDI for Export Assistance, 1976-81

	1980-81	1976-81
Loans and guarantees:		
Number	14	63
Value ($ millions)	8.1	27.0
Grants:		
Number	112	405
Value ($ millions)	24.8	87.5
Total		
Number	126	468
Value ($ millions)	32.8	114.5

SOURCE Société de développement industriel, *Rapport annuel 1980-1981*.

The Ontario Development Corporation

Ontario's export-support program, which dates back to 1971, is administered by the Ontario Development Corporation (ODC). The ODC provides essentially short-term supplier credit to small businesses. For 1979-80, the corporation reported credit approvals of $17.2 million in the field of exports, disbursements totaling $28.2 million, and outstanding commitments amounting to $43.6 million.

Official Development Assistance

Clearly, Canada's "official development assistance" (ODA) to developing countries is not intended to promote Canadian exports. Just as clearly, however, it does just that in practice. There is nothing shocking in this. Whether it is disbursed in cash, in goods, or in services, a donation remains a donation. But since exports under ODA are financed entirely or almost entirely by taxpayers, they are not comparable to those which are paid in cash by the purchaser or even to EDC-financed exports, which are subsidized, if at all, for only a fraction of their value.

In any event, Canadian exports under this country's ODA programs are considerable. Table 2-17 summarizes the data available. In 1979-80, Canadian government assistance amounted to $1.2 billion – 0.42 per cent of the 1980 GNP. Only part of this assistance was in the form of exports of goods or services – a part that is very difficult to measure. We do know, however, that 80 per cent of Canada's bilateral assistance is tied (except for transportation costs) and that 90 per cent of food assistance is provided in kind. Multilateral aid is untied, but that does not mean that it does not provide any benefits to Canadians. It is well-known that, in international tenders, Canadian firms perform rather poorly and at best win only half of their share of the available contracts, but they do win some contracts nonetheless. Finally, other assistance programs largely take the form of technical services or cooperation provided by Canadians; they also include the new industrial-cooperation program designed for Canadian firms.

Table 2-17

Canadian Official Development Assistance, 1979-80

	Net disbursements
	($ Millions)
Bilateral assistance:	
Grants	274.1
Loans	250.3
Food assistance	83.7
Repayments	-9.4
Subtotal	598.8
Multilateral assistance:	
International financial institutions	282.9
Food assistance	94.6
United Nations agencies	50.0
Other programs	73.0
Subtotal	500.5
Other programs:	
Nongovernmental agencies	78.1
International Development Research Centre	35.7
Emergency relief	19.0
Other	9.0
Subtotal	141.8
Total	1,241.1

SOURCE CIDA, *Annual Report 1979-1980*.

In view of these observations, Canadian exports of goods and services attributable to the assistance program for 1979-80, are estimated on the basis of the following assumptions and corresponding amounts:

Type of assistance:	Value ($ Millions)
Bilateral - 90 per cent of food aid plus 60 per cent of grants and loans	381
Multilateral - 90 per cent of food aid plus 40 per cent of other aid	247
Other programs - approximately 80 per cent of the total	120
Total	748

As can be seen, this estimate gives a figure of $748 million, or 60 per cent of total payments under ODA.[28]

The identification of the recipient countries is always of major interest. We have examined this question above for the EDC.

One of the presumed advantages of the EDC's presence is that it helps to diversify Canada's trade outlets. As for CIDA, it is intended to assist the poorest countries. The issue that arises in the context of an analysis of the benefits to society is whether these two functions are complementary or independent. In other words, is CIDA's bilateral assistance targeted at the same countries as those selected by the EDC for diversification of Canadian exports? Table 2-18 compares CIDA assistance recipients with EDC borrowing clients. Total exports are also distributed according to the same categories of countries.

The table is very enlightening, in our view. CIDA devotes 77 per cent of its assistance to countries with a per capita GNP below US$450, while the EDC aims only 7 to 9 per cent of its export credits at those same countries. Moreover, CIDA does not assist any industrialized country, as might be expected, but approximately 30 to 35 per cent of the value of EDC financing goes to advanced countries.

These figures are a fairly good reflection of the respective roles of CIDA and the EDC. In terms of national interest, however, there is little chance of these two sets of programs being mutually supportive and creating externalities that might otherwise be desirable.

The Canadian Wheat Board

As everyone knows, the Canadian Wheat Board is a grain-marketing agency rather than a financial institution in the true sense of the term. Nonetheless, it has approved loans to developing countries for a net sum of $440 million in 1980 – almost $100 million more than the EDC.[29]

The CWB operates as follows. It is responsible for selling grain on a cash basis or on credit. The sales

Table 2-18

Distribution of CIDA Bilateral Development Assistance and EDC Export-Financing Assistance, by Selected Characteristics of Recipient Countries, 1980

	CIDA net disbursements	EDC loans approved	EDC disbursements, 1961-80 average	Total Canadian exports
		(Per cent)		
Low-income countries[1]	77.6	7.6	9.3	2.6
Middle-income countries	19.5	20.7	32.2	2.9
Newly industrialized countries[2]	0.3	27.4	19.0	4.4
OPEC member countries	0.1	9.5	10.5	2.5
Other developing countries	2.5			0.1
Subtotal	100.0	65.2	71.0	12.5
Industrialized countries		34.8	29.0	87.5
Total	100.0	100.0	100.0	100.0
		($ Millions)		
Value	557	902	4 931	66 486

[1] With per capita GNP below $U.S. 450 in 1978.

[2] Includes Argentina, Brazil, Greece, Mexico, Portugal, Singapore, South Korea, Spain, and Yugoslavia.

SOURCE CIDA (1980), pp. 18 and 52; estimates by the authors, based on EDC, *Annual Report 1980*; World Bank, *Report on World Development*, Washington, 1980.

made on credit have a maximum term of three years; until 1978, some credit was granted for longer periods when EDC insurance was involved. The board finances its loans by obtaining from the chartered banks loans that are guaranteed by the federal government.

It is impossible to determine the interest rates applied to these sales. In a memorandum to the OECD's Development Assistance Committee, CIDA (1980, p. 46) stated that CWB loans are granted at below-market interest rates. In turn, the board described the situation as credit granted "at compensatory interest rates based on the board's cost of borrowing."[30]

In line with this policy, the interest rates on loans have generally been floating in the past two years, but the board could still suffer losses, and its loans could thus include a subsidy to borrowing countries.

The amounts in question are considerable. Table 2-19 reveals that the credits granted exceeded $1 billion in 1980 and 1981.

Table 2-19

Gross and Net Loans Approved by the Canadian Wheat Board, Fiscal Year Ending 31 July, 1977-81

	Loans approved	Repayments	Net loans
		($ Millions)	
1977	405	627	-222
1978	569	266	303
1979	554	340	214
1980	1,045	597	448
1981	1,113	730	383

SOURCE Letter to the authors from W. E. Jarvis, Chief Commissioner, Canadian Wheat Board, dated 4 May 1982.

The amounts of the loans outstanding have increased very rapidly in recent years, totaling $1.8 billion at 31 July 1981 (Table 2-20).

Canadian Wheat Board credits are granted to a fairly small group of countries. China is the major recipient of this program, but other countries with debts outstanding in 1980 were Brazil, Haiti, Israel, Jamaica, Peru, Poland, and Zambia.

Canadian grain exports supported by credit facilities are quite large. In volume, they represent slightly more than 20 per cent of total grain exports. In 1979-80, this financing covered 5.4 million tonnes of grain, while total exports amounted to almost 24 million tonnes – a proportion of 22.7 per cent.

Table 2-20

Canadian Wheat Board Loans Outstanding, Fiscal Year Ending 31 July, 1977-81

	Value
	($ Millions)
1977	442
1978	757
1979	975
1980	1,420
1981	1,626

SOURCE Letter to the authors from W. E. Jarvis, Chief Commissioner, Canadian Wheat Board, dated 4 May 1982.

Before ending this chapter, it is appropriate to add up all the sources of export financing discussed above (see Table 2-21).

Table 2-21

Total Government Export Financing, by Agency, 1980

	Value
	($ Millions)
Export Development Corporation	959
Canadian International Development Agency	748
Canadian Wheat Board	440
Société de développement industriel	33
Ontario Development Corporation	28
Total	2,208

SOURCE See text.

Like us, the reader will no doubt be surprised to discover that Canada devoted a total of $2.2 billion to export financing – twice the amount provided by the EDC alone. It is also interesting and revealing to compare that volume of assistance with relevant exports, using the data from Table 2-18. In fact, this financing must be related to total exports to developing countries. Leaving aside ODC and SDI financing and taking 65 per cent of EDC loans, the assistance thus defined amounted to $1.8 billion in 1980. The denominator will include total exports to the developing countries, which amounted to $8.3 billion in 1980. Therefore, Canadian programs of financial assistance to exports that year covered 22 per cent of exports to developing countries.

3 Export Financing in the Private Sector

In Chapter 1, we established clearly the objectives set by government in creating the Export Development Corporation: to promote exports without displacing the private sector; at the same time, to provide competitive rates, relative to those offered by foreign government agencies operating in the same market. In general, encouragement to exports involves considerations relating to the balance of payments, job creation, diversification of Canada's largely bilateral foreign trade, and industrial strategy.

These considerations are macroeconomic in scope and involve society as a whole. However, there is also a set of benefits and risks to the individual exporter, and these are discussed in the first section of this chapter.

Opportunities and Risks

A firm planning to sell its products abroad will weigh carefully the potential benefits and disadvantages that this decision may generate. On the positive side, the firm will list the opportunity to increase sales and profits, as well as the potential for stabilizing its output, both seasonally and cyclically, through greater market diversification. If the firm must conduct its operations with certain minimum units of equipment, it may also consider the opportunity of achieving significant economies of scale that would be associated with an increase in its production volume. Finally, it must keep in mind that some export markets have a greater growth potential than the domestic market, depending on the products involved and on the degree of development of the countries considered. One example is the very promising markets in newly industrialized countries or, during the 1970s, in the major oil-exporting countries.

With the prospect of broadening its horizons, the firm may consider new activities that would be related or complementary to its primary production and to its investment, research-and-development, and restructuring projects.

Against the benefits from exporting, however, must be weighed a certain number of additional risks beyond those which the firm must overcome in the domestic market.

One of the major risks specific to the exporting activity is the exchange-rate risk arising when a firm cannot set its prices in its own currency. The exporter is then able to protect himself by turning to the forward market, but this coverage is not available when delays in production or delivery exceed six months.

The political risks are also important, as recent experience in Iran, Poland, and Argentina has brutally shown. Unforeseen changes can lead to the suspension of permits or to foreign-exchange controls (as in Mexico and France). Even when the exporter obtains insurance against these risks, the cost of exporting is increased.

The very remoteness of markets is a decisive factor in assessing possible situations and potential customers. As a foreigner, the businessman is poorly acquainted with the regulations in force or with differences in business practices. After-sales service can also prove to be much more costly.

Finally, periods of grace for payment are generally longer, if only because of the distances involved. Arrangements must also be made for shipping, customs clearance procedures, and transfers of funds.

Exporting therefore involves advantages and risks, compared with local sales. The relative weight of each element will determine the firm's ultimate decision.

Export Insurance in the Private Sector

There is only one private firm in Canada that insures exporters against risks specific to their business – namely, the American Credit Indemnity Company of New York, which covers only exports to the United States.[1] The literature includes some references to timid attempts by some firms to assist exporters or the initiators of major projects (ETI, Cankey, Ultimate Risk Insurance), but none of these programs appear to have reached any significant stage of development.

This situation raises several questions, particularly in view of the highly profitable nature of the Export Development Corporation's insurance activities.

In fact, however, a study of the various export-financing and insurance systems in the world reveals that there are few countries where the private sector plays a major role in the field of insurance. In general, export-credit insurance, primarily for noncommercial (or political) risks, is provided by public or quasi-public agencies.[2] In some countries, the public sector generally reinsures the risks insured by the private sector. The only countries where the private sector appears to operate without government intermediation are:

- West Germany, where Hermes and a few other insurance companies cover certain commercial risks, primarily in the case of trade with the developed countries;[3]
- the United States, where the Foreign Credit Insurance Association, in addition to acting as the Eximbank agent for noncommercial risks, covers some commercial risks on its own behalf. In addition, Lloyds and the American Insurance Group appear to be prepared to cover commercial and political risks for U.S. exporters;
- Italy, where some companies cover short-term commercial risks but can obtain reinsurance through the Istituto Nazionale delle Assicurazioni; and
- the Netherlands, where the Nederlandsche Credietverzekering Maatschappij has covered commercial and political risks since 1925, although exporting firms can obtain reinsurance through the government in some cases vaguely defined as lying outside the private sector.

It can be seen that private-sector presence in the field of export insurance has, so far, been a rare phenomenon throughout the world. It may be that the risks linked to export trade are fairly special, as mentioned above. In fact, export orders are often either very large or nonrecurring, which makes actuarial calculations very difficult. Even in a market like the United States, where risk-spreading should be fairly easy, private firms still feel the need to join forces to deal with the risks associated with export-credit insurance. Furthermore, it is quite possible that, until now, the various government agencies have had premium structures that were incompatible with private practices and therefore prevented private companies from entering this market. In Canada, the creation of the Export Credits Insurance Corporation after the Second World War may have had a deterrent effect.

Nonetheless, it appears that the private sector is now beginning to test the waters of the Canadian market of export-credit insurance. One Canadian insurance brokerage firm told us during our research that it could henceforth insure Canadian exporters at rates competitive with those of the EDC in cooperation with two groups of U.S. firms – the American Insurance Group and the Indemnity Insurance Company of North America.

Without going into details about all the policies described in prospectuses, it appears that the services provided by the insurance companies in question are very similar to those of the EDC in several respects.[4]

The entry of private insurance firms is recent and timid; it appears to be linked to the particularly high profitability of insurance companies at the present time, resulting from high interest rates in the financial markets. It remains to be seen whether these firms will maintain their operations when faced with more difficult circumstances.

This brief review of export-credit insurance demonstrates the overwhelming presence of government in this field both in Canada and throughout the world. However, several governments include private firms in the operation of their programs to a greater degree, by delegating management responsibilities, by reinsuring the risks assumed by the private sector, or by creating quasi-public agencies in which private insurance companies hold a minority interest. Given the current favourable circumstances, Canada might consider giving encouragement to greater private-sector participation in export insurance in some form or other.

The Role of the Banks in Export Financing

Financing mechanisms vary depending on whether the producer manufactures a consumer good or a production good. Supplier credit and purchaser credit are among such mechanisms. Generally, supplier credit applies to short terms while purchaser credit applies to medium and long terms.

Banks offer the full range of services required by exporters: information services, execution of payments, and financing.

Bank Services

Canadian banks provide exporters – occasionally free of charge – with information services on potential foreign customers, regulations in force, foreign representatives assigned to Canada, restrictions on currency transfers, economic or political conditions in importing countries, and so forth. When necessary, they assemble information and assessment files on the financial position of importing firms.

Of course, banks are first and foremost payment agencies. Their worldwide network of branches and agents enables them to handle transfers of funds for exporters. For this purpose, they provide the convenience of an open account into which are deposited at fairly regular intervals the payments from well-known purchasers or those associated with the exporting firm. The importer's bank may also issue a revocable or irrevocable letter of credit in the exporter's name, and the latter may occasionally request his own bank to confirm such letters of credit in order to avoid any potential problems. Finally, letters of credit may be supplemented by documentary drafts exchanged by the banks. Naturally, currency transactions on a cash or term basis are an integral part of bank services.

Export Financing

Let us now turn to the actual financing of exports. In practice, 90 per cent of Canada's foreign trade is covered by short-term financing. As the banks are the only institutions providing this type of credit, they play a predominant role in export finance.

An exporter who requires financing first contacts his branch manager or, in the case of major customers, the officer in charge of his account in the bank's business-services section. He is then directed to the international-services division, with which he must deal.[5]

In the international division, the application is studied in relation with the information available on the importing country and customers, with a view to determining as quickly as possible the terms under which the bank could provide financing.

In some cases, the bank will invite the exporter to contact the EDC in order to obtain insurance or medium- or long-term financing.[6] Generally, the exporter himself must deal with the nearest branch of the EDC, where his application will be examined all over again.[7] When the EDC reaches its decision, it may or may not request the bank to participate in financing the transaction.

What types of financing are available from the banks?

- First, the banks may finance production itself, either by opening lines of credit or through inventory loans. They are in a position to make the distinction between export loans and loans for domestic production when the EDC insures export credits.

- The banks also finance exporters by discounting promissory notes accompanying a term documentary draft. The discount rate is lower if the exports are insured. The exporter can thus obtain his funds as if the sale had been paid in cash. The maturity of this type of supplier credit rarely exceeds 180 days but may run to 270 days.[8] If the draft is not discounted, it can at least serve as collateral.

- Short-term purchaser credit appears to exist,[9] although we have some reason to believe it is only rarely used, since the costs of obtaining information on foreign purchasers in such a transaction can be very high. In purchaser-credit operations, the bank lends directly to the purchaser at a floating rate for a term of one year or less. The bank charges its base rate or the London interbank rate plus a margin that varies according to the customer.

- Forfaitage consists in discounting promissory notes issued by the foreign purchaser to the Canadian exporter. The bank discounts the notes at a lower price than the nominal price, and the exporter thus pays for the service that he receives. The maximum term to maturity is five years. Since the bank knows the terms precisely, it can borrow on the market to finance its loan at a fixed rate. Known since the 1960s, this type of financing was used primarily in Europe originally, but it is gaining ground in Canada. Despite the presence of the banks in this field, the EDC has also begun forfaitage operations, as mentioned in Chapter 2.

- Banks also supply medium-term purchaser credit at floating rates (and occasionally at fixed rates, it would appear).

Clearly, the banks are not in a position to play a major role in the long-term market. As a Canadian banker recently noted: "Stiff competition and the act of involvement of government agencies of the exporting countries have pressured the interest rates below those of the commercial market."[10]

The banks are not in a position to compete with the public agencies, not only because the latter offer low interest rates but also because they lend at fixed rates. The banks cannot lend at fixed rates because there is virtually no private long-term market at the international level.

Canadian banks do, however, remain active in this market by providing loans wherever possible on a LIFO (last in, first out) basis for down-payments, local costs, and the portions of contracts that are not financed by the EDC. The banks therefore limit themselves to the shortest terms to maturity. Nonetheless, they do occasionally participate fully in long-term projects, either by lending funds themselves with no government participation or by organizing internationally syndicated loans (purchaser credit used to finance public agencies or governments). It is highly probable that the presence of the banks in such cases is explained by the total lack of participation of government export-financing agencies at the international level.

In summary, the banks operate primarily in the short-term market, which represents the largest share of the financing needs of Canadian exporters. Their entry into the medium-term market is more recent and still modest. Exporters have long called for increased bank involvement in this market, and it was specifically recommended in the Gibson report (1968, p. 15).

In the field of long-term export financing, the very presence of government agencies (not only the EDC but also such foreign firms as the Compagnie française d'assurance pour le commerce extérieur, the Export Credits Guarantee Department of Britain, the U.S. Eximbank, and so on) appears to prevent the banks from playing a significant role. When asked for statistics on medium- or long-term foreign loans, one banker told us that this area involves only a minuscule proportion of his bank's international operations.

The International Business of Canadian Banks

We now turn to a statistical analysis of bank operations, first in the international market as a whole, and then in export financing proper. Lack of information, particularly on the second point, makes this analysis a brief one.

Since 90 per cent of Canada's foreign trade is financed for short terms, as already stated, the banks are very active in this market. The market itself is extensive, as seen in Canada's exports of 76 billion dollars' worth of goods in 1980. It should therefore come as no surprise that the administrative organization of banks is internationally oriented. In fact, the typical flow chart of Canadian banks gives their international operations a central role. We also know that Canadian banks have nearly 300 branch offices spread throughout the world and 5,000 other agencies acting on their behalf.

Furthermore, Canadian banks are attaching greater importance to their international operations. At least two major institutions recently reorganized their international division to adjust to the new needs emerging throughout the world. The Royal Bank has created the "world trade and merchant banking" administrative unit. This division stresses major international projects requiring the organization of loan consortia and highly technical cooperation with various international export-assistance agencies. It promotes market development for Canadian exporters and plays a role in export-financing mechanisms. The Royal Bank has also set up a new subsidiary – the Royal Bank Export Finance Company Limited – to provide specialized financing services to small Canadian exporters. At the same time, the Bank of Montreal is currently reorganizing its international services to permit the financing of major projects.

The growth of Canadian banks in the international market is attributable to several factors,[11] the most important undoubtedly being the astounding growth in the Eurocurrency market since the start of the 1960s.

Aside from the profitability of these international operations – a topic to which we shall return below – their expansion may also be explained by the entry of foreign banks into Canada, particularly since 1974. Foreign banks operated in this country without hanging out their shingle, since the former Bank Act prohibited this, but they stimulated competition and probably forced Canadian banks to broaden their range of services. By 1977, there were some 100 branches of foreign banks in the country; in 1980, their total assets amounted to $8.2 billion.

The new Bank Act, passed in 1980, accelerated the competitive process by encouraging the creation of new banks, both Canadian and foreign, and to some extent it officialized the status of the foreign banks already present. By the end of 1982, some 55 branches of foreign banks had been established under the 1980 Act, and a new Canadian-owned bank had been created.

These developments bode well for export-financing activities in general and for services to businesses, as these new institutions will obviously have to specialize in segments of the market that had previously been neglected.[12]

Table C-1 reveals the growing role that Canadian banks play in international loan consortia. From 1979 to 1980, the banks made inroads on world markets in terms of both the number of syndicated loans and their ranking in the international banking community. Even the National Bank of Canada joined the ranks of the multinationals. Only the Bank of Montreal recorded a decrease in the amount of syndicated loans.

The steadily growing interest by Canadian banks in international operations also appears in the statistics on asset shares. Table 3-1 shows that the international assets of Canadian banks represented approximately 26 per cent of their total assets in the mid-1970s – a proportion that had risen to almost one-third by 1980. When only the five major banks are considered, the situation is the same or slightly more pronounced (Table C-2).

Table 3-1

Asset Position of Canadian Banks, 1971-80

	Canadian assets		International assets	
	Value	Share of total	Value	Share of total
	($ Billions)	(Per cent)	($ Billions)	(Per cent)
1971	39.4	75.3	12.9	24.7
1972	46.0	75.9	14.6	24.1
1973	54.5	72.7	20.5	27.3
1974	67.4	73.8	24.2	26.2
1975	77.4	73.5	27.9	26.5
1976	89.7	73.6	32.1	26.4
1977	106.4	72.1	41.1	27.9
1978	127.0	70.6	52.8	29.4
1979	154.2	69.5	67.4	30.5
1980	181.6	67.2	88.3	32.7

SOURCE Pitfield Mackay Ross Ltd. (1981), p. 7.

Table 3-2 reveals that an increasingly large share of the banks' international assets is composed of loans to government agencies, businesses, and individuals, while the share of interbank transactions has been declining. However, these loans do not necessarily reflect loans to exporters, since the banks' business is very diversified at the international level.[13]

Table 3-2

Composition of International Assets of Canadian Banks, 1971-80

	Loans	Interbank loans	Other
		(Per cent)	
1971	37.0	57.5	5.5
1972	35.6	59.6	4.8
1973	28.8	66.8	4.4
1974	36.7	57.4	5.9
1975	42.3	53.8	3.9
1976	40.2	56.0	3.8
1977	41.6	51.8	6.6
1978	40.3	50.9	8.8
1979	38.7	49.1	12.2
1980	43.2	47.9	8.9

SOURCE Pitfield Mackay Ross Ltd. (1981), p. 7.

Table C-3 shows after-tax profits as a percentage of total profits for the five largest Canadian banks. It reveals that almost 45 per cent of their profits come from their international operations, which correspond to only 33 per cent of their total assets. The growth in these operations has been meteoric, with their share of total profits rising from 26.8 per cent in 1976 to 44.6 per cent in 1980.

The geographic distribution of the foreign-currency assets of the banks reveals the difference between their policies with respect to the international markets in general and the policies of the EDC with respect to export loans (Table 3-3).

Table 3-3

Distribution of Foreign-Currency Assets of Five Major Canadian Banks, by Region, October 31, 1980

	Value	Share of international assets	Share of total assets
	($ Billions)	(Per cent)	
Europe	29.5	36.8	12.1
United States	18.2	22.7	7.5
Canada	4.5	5.6	1.8
Latin America	17.1	21.3	7.0
Asia and Pacific area	9.3	11.6	3.8
Middle East and Africa	1.6	2.0	0.6
Total	80.2	100.0	32.8

SOURCE Pitfield Mackay Ross Ltd. (1981), p. 13.

More than 65 per cent of the Canadian banks' international assets are held in developed countries (Europe, the United States, and Canada), 2 per cent in Africa and the Middle East, and 33 per cent in other regions (Latin America, the Far East, and the Caribbean).[14] By comparison, the geographic distribution of EDC loan approvals is as follows: 19.2 per cent for Africa and the Middle East, 36.3 per cent for Europe and the United States, and 45.5 per cent for other countries (Table B-11). It is therefore clear that the EDC directs its operations more towards the developing countries than the banks do.

Unfortunately, the statistics just discussed do not describe the banks' operations on the basis of the maturities of their loans, and they do not cover the financing of exports in particular. For long-term loans, the only available indications are from the EDC's annual reports, which provide data on the banks' participation in EDC loans (Table 3-4).

It would appear that bank participation in EDC loans grew fairly rapidly between 1972 and 1978, when it reached about half the number and value of EDC loans.

Table 3-4

Bank Participation in EDC Financing, 1972-80

	Direct bank participation		Related bank participation		Total bank participation		Total EDC loans[1]		
	Value	Number of loans	Value	Number of loans	Value	Number of loans	Value	Number of loans	Number of guarantees
	($ Thousands)		($ Thousands)		($ Thousands)		($ Thousands)		
1972	6,654	4	0		6,654	4	289,914	28	0
1973	35,000	1	0		35,000	1	497,895	36	1
1974	14,926	3	49,940	2	64,866	5	567,106	44	1
1975	5,260	4	195,643	18	200,903	22	886,574	40	0
1976	109,786	6	76,296	22	186,082	28	759,900	44	1
1977	62,872	12	51,938	6	114,810	18	1,185,000	43	n/a
1978	268,088		532,142		800,230		1,759,734	37	4
1979	252,237		372,278		624,000		2,072,814	52	2
1980	5,057		72,256		77,313		928,669	94	0

1 Including bank loans.
SOURCE EDC, *Annual Report*, various years.

However, this contribution began to decline in 1979 and was almost reduced to zero in 1980, following the rapid rise in market interest rates and the adherence of other government export-credit institutions to the minimum levels set in the OECD agreement.[15]

In summary, the Canadian banks are carving out a growing share of the international financing markets. But we cannot determine their precise contribution to the financing of Canadian exports aside from their EDC-related activities. The OECD publication, *Development Co-operation*, does, however, give us a glimpse of bank export credit to the developing countries.

Tables C-4 and C-5 give the statistics on government export credit, and Tables C-6 and C-7 provide data on private credit. To gain an idea of the relative importance of Canadian activities in these areas, we present the absolute figures and the percentages for Canada as a share of all export assistance granted by the member countries of the OECD's Development Assistance Committee (DAC).[16] It should be noted here that Canada's GNP (expressed in U.S. dollars) as a proportion of the total GNP of DAC countries over the 1970-80 period ranged from 4.2 per cent in 1971 to 3.4 per cent in 1980.

These statistics reveal that Canada provides a large share of government export assistance among all DAC countries (Table C-4). In terms of net contributions, the Canadian share varies from a low of 6 per cent in 1973 to a high of 33.3 per cent in 1979. In terms of gross contributions, Canada's share ranges from a low of 4.5 per cent in 1970 to a high of 20.5 per cent in 1980.

These large contributions are surprising in view of Canada's small share of the total GNP of all DAC member countries. One reason for this situation is the fact that the OECD considers as private export credit the contributions of countries such as France although the Banque française du commerce extérieur, which channels a large part of these credits in France, is a quasi-public agency just as the EDC is in Canada.

Even when all French export credits are assumed to be public rather than private (Table C-5),[17] Canada's relative share of the ODA provided by DAC countries still exceeds its share of GNP throughout the entire period for net contributions, and since 1974 for gross contributions as well. The data for 1979 and 1980 are particularly enlightening in this respect. Thus, even under this extreme assumption, Canada plays a very important role in government export assistance.[18]

But what of the Canadian banking sector? Table C-6 reveals that Canada's relative share of private export credit to the developing countries never exceeded 5.1 per cent between 1970 and 1980. The net contributions are more often negative than positive, and the gross contributions have been very small, particularly since 1975. Table C-7 gives the same calculations, with French export credit being classified as public assistance. As can be seen, the percentages change very little and remain very small, particularly after 1975.

It therefore appears that the participation of Canada's banking sector in export credits to the developing countries is limited.

This conclusion fits into the broader context described above (Table 3-3), where the banks assist developing countries by granting loans and making investments for purposes other than exports. Thus, according to the OECD, Canadian banks accounted for 9 per cent of bank loans from DAC countries during the 1970s, which was more than twice Canada's share of the GNP of these countries. The potential and financial resources are there, so if these resources are not used for export credit as such, we should perhaps seek an explanation in the institutional arrangements specific to Canada and particularly to the EDC's policies.

The Complementarity of Public- and Private-Sector Activities

In Chapter 2, the operations of the EDC and, at the same time, those of private insurance companies and banks were described. To summarize the discussion, two tables will illustrate the complementarity of public- and private-sector activities in the area of exports (Tables 3-5 and 3-6).

Until recently, the EDC was generally established in segments of the market where it was the sole operator. It was alone in the export-insurance market. In the export-financing market, it dominated in the area of long-term loans at fixed rates, leaving the medium- and short-term markets to the banks.

For some time now, the private sector has been prepared to extend its operations into areas previously occupied only by the EDC. This is particularly evident in the export-insurance field, but the growing strength of banks in the international arena is also evident. Recently, it appears that the EDC and the banks have almost simultaneously rediscovered forfaitage.

Table 3-5

Participation by the Public and Private Sectors in Export-Credit Insurance Operations, Canada, Since 1981[1]

	Public sector	Private sector
Commercial risks covered:		
Insolvency of foreign purchaser	yes	no
Default by foreign purchaser	yes	yes[2]
Unilateral and arbitrary cancellation of a contract by the foreign purchaser	yes	yes[2]
Additional handling costs resulting from stoppage or rerouting of shipments outside North America	yes	yes
Political risks covered:		
Embargo or difficulties in funds transfers preventing Canadian exporters from being paid	yes	yes
Cancellation or nonrenewal of an import or export permit	yes	yes
War or revolution in the purchaser's country	yes	yes
War between Canada and the purchaser's country	yes	no
All other circumstances beyond the control of the exporter and purchaser	yes	yes
Expropriation of the purchaser	no	yes
Types of policies:		
Short-term insurance (goods and services)	yes	yes
Medium-term insurance (individual operation)	yes	?
Loan pre-disbursement insurance	yes	no
Foreign investment insurance	yes	yes
Performance security	yes	yes
Consortium insurance	yes	no
Guarantee insurance	yes	no[3]
Tender insurance	no	yes

[1] Prior to 1981, the private sector did not participate in export credit insurance operations.

[2] Only when the purchaser is a public agency. The American Insurance Group has announced that it is studying the possibility of extending insurance to cover private purchasers.

[3] But the guarantees themselves are provided by the private sector.

SOURCE See text.

Table 3-6

Summary of Services Offered by the Public and Private Sectors in Export Finance, Canada

	Public sector	Private sector
Short-term contracts	Nil	Discounting of notes Financing of output Purchaser credit
Medium-term contracts	Forfaitage	Forfaitage Discounting of commercial paper at floating rates Purchaser credit
Long-term contracts	Lines of credit Fixed rate loans Proportion of loans at floating rates	Loans at floating rates (part or all) Loans for down payments Loans for local costs International syndication

SOURCE See text.

This last EDC initiative raises a major problem. To the extent that the EDC has a policy of not competing with the private sector, one might ask what benefits it intends to offer exporters through forfaitage that are not already offered by the private sector. Does the EDC intend to subsidize these medium-term credit operations?

4 Profitability and Social Costs of EDC Financial Resources

Basic Concepts

The purpose of this chapter is to assess – albeit only partially – the EDC's economic role. By definition, this type of analysis is aimed at identifying and measuring the benefits resulting from a given activity, as well as the cost of the resources involved.

To achieve this, a distinction must first be made between two fundamental concepts of benefits and costs. The first concerns their *financial* aspects. A corporation such as the EDC obtains capital from the government of Canada and from the market. The use of this capital entails a financial cost that can be expressed, for example, as the interest that the EDC pays on its borrowings. Corresponding to this concept of financial cost is the concept of financial benefit or return. The EDC uses the funds that it has obtained to make loans or investments. It will then earn interest income that, relative to the loaned capital, will represent a certain rate of return. The difference between the income and cost of capital, after allowing for administrative costs, determines whether the corporation is financially viable – in other words, whether it earns profit.

This method of assessment is quite similar to that applied to private firms. However, since the EDC is a Crown corporation that is exempt from paying income taxes and that has never payed dividends to its sole stockholder, a negative difference could easily arise between the financial return on funds invested by the EDC and the return that these same funds would have earned had they been invested in the private sector. This leads us to the approach adopted below.

The second basic concept is that of *social* cost and benefit. We define the social cost of the resources used by the EDC as the return that society as a whole forgoes by investing funds in the EDC rather than elsewhere in the economy. This concept of social cost is identical to the social opportunity cost of resources. Corresponding to this is the concept of social return, which consists of the financial return and a range of benefits associated with the externalities that government financing of exports produces (or is supposed to produce) for all of society. These various concepts are illustrated in Figure 4-1.

In this chapter, we seek to determine the EDC's financial costs and benefits – and thereby its financial viability. In the next chapter, we also attempt to estimate the social cost of the resources used by the corporation, but do not measure the social benefits. First, we determine the rate of return on funds invested by the EDC (box 2) and compare it with the social cost of these funds (box 4). If the return on EDC capital is less than its social cost, one can then conclude that the EDC receives a government subsidy in the economic sense of the term. The major objective of this chapter, in fact, is to measure the value of this subsidy. No attempt is made to determine here whether the subsidy is desirable or detrimental, since we do not yet know the economic, social, or political benefits that government intervention in export finance produces or is supposed to produce. We assume, however, that the expected benefits must at least equal the amount of the subsidy if the subsidy is to be justified.[1]

Application

Armed with a suitable vocabulary, we can now indicate briefly what steps will be followed in our calculations.

To determine the financial cost of the capital invested (box 1), the EDC is viewed as an integral (but marginal) part of the Canadian government. This enables us to assume that the cost measurements generally applied to government investment in Canada also apply to the loans granted by the EDC. In particular, these loans are assumed to be financed through borrowing – that is, through the issuance of government bonds. Based on these assumptions, the financial cost of capital is simply the average interest rate paid on public debt. This rate has been computed from data provided by the Department of Finance (see Tables D-1, D-2, and D-3).

Figure 4-1

Concepts for Assessing EDC Activities

	Financial concepts	Economic concepts
Costs	(1) Cost of borrowing capital = cost of public debt	(4) Return on capital in the private sector
Benefits	(2) Interest income = return on capital invested by EDC	(5) Return on capital invested by EDC + external economies such as job creation or improved economic structure
Benefits less costs	(3) Financial return	(6) Social return

The methods used to determine the social cost of capital (box 4) are quite familiar; they are described in Harberger (1969*a*, 1969*b*), Jenkins (1977), and McCaughey, Mintz, and Carrière (1981), to mention just a few. We use the figures estimated for Canada by Jenkins, Burgess (1981), and McCaughey, Mintz, and Carrière, which are 10, 7, and 4 per cent, respectively.[2]

The financial return (box 2) that the EDC earns from its activities could easily be determined if the interest rates that the EDC charges its clients were known. As mentioned in Chapter 2, however, the EDC does not publish this information. Our estimates are therefore calculated using information contained in the corporation's financial statements. Our primary objective is to determine the return on export loans, but we also examine the profitability of the EDC's insurance and investment operations. The analysis covers each year since the creation of the EDC (1970-80). The following rates of return are estimated: the gross return on assets (that is, before deduction of administrative expenses); the net return on assets (after deduction of administrative expenses); the net return on government capital invested in EDC; and the real return (after adjustment for inflation) corresponding to the previous rates. The return on assets is also estimated for various subgroups of EDC activities: export loans, investments, loans and investments, loans and insurance, and all activities combined. Throughout our calculations, every effort is made to avoid arbitrary assumptions; to achieve this, several estimates using a number of hypotheses or variations of the concept of rate of return are examined in most of the cases. In particular, we always attempt to use estimations that overestimate the rate of return in order to obtain the smallest possible figures for subsidies. Once the rates of return are estimated, we measure the differences between these rates of return and the various estimations of the financial and social costs of the capital invested, mentioned earlier.

Finally, it must be noted that the calculations do not take into account the fact that the exports financed by the EDC may be subsidized in other ways than through export credit, such as through reduced rates for electricity produced by government utilities in Canada, oil-price controls, various industrial-incentives programs in some regions, or preferential tax treatment of some industries (such as mining).[3] Of course, if the effects of these other programs were included, the total measured subsidy would increase accordingly.

The rest of this chapter describes the methods for estimating the rates of return, the rates and amounts of subsidy, the results obtained for operations carried out by the EDC on its own behalf, and those for all EDC activities combined.

Measuring the Rate of Return on Invested Capital

As the EDC's net-income figures reveal (Tables D-1 and D-2), the corporation has always been profitable in that it has never recorded a loss. Nonetheless, the presence of an accounting profit is only a very incomplete index of a firm's viability; profits must be compared with the capital invested to obtain the rate of return. Furthermore, a profit may only be the result of access to inexpensive financing, such as government share capital and loans.

This section examines the return on capital invested by the EDC on its own behalf. Two different concepts of invested capital are used. The first is based on all the capital available to the EDC, and the second on the capital invested by the federal government alone – namely, the share capital and retained earnings, which correspond to the EDC's equity, plus government loans to the corporation. We thus attempt to measure what we term the financial return on invested capital. Since we know how this capital is used – on loans, insurance, or investments – separate rates of return for the major categories of EDC activities can also be estimated.

Before discussing the methodology, we will define the symbols in the order of their appearance in the text:

IL_t = export loan interest and fees earned (for year t);
PRL_t = annual provision for losses on loans (and guarantees);
PEL_t = loan writeoffs less recovered loans;
KL_t = amount of loans receivable (including accumulated provisions for losses)
= capital less participation by other lenders plus accrued interest and fees;
$PRLA_t$ = accumulated provisions for loan losses;
IC_t = interest earned on investments;
KC_t = investment in financial capital
= cash and short-term investments plus Canada bonds at depreciated cost plus accrued interest;
VA_t = premiums and fees earned on insurance (and guarantees);
PEA_t = insurance claims paid less claims recovered;
PRA_t = annual provision for insurance claims;
$PRAA_t$ = accumulated provisions for insurance claims;
KR_t = other assets;
F_t = administrative expenses;
FL_t = administrative expenses attributable to loans;
FC_t = administrative expenses attributable to investments;
FA_t = administrative expenses attributable to insurance;
BN_t = net income of the EDC,
IG_t = interest paid to the Government of Canada;
D_t = total loans payable;
DG_t = loans payable to the Government of Canada;
DR_t = other liabilities;
CA_t = Canada Account;
K_t = total assets (including accumulated provisions for losses on export loans and for insurance claims).

The flow variables (IL_t, PRL_t, and so on) are always based on the fiscal year ending 31 December, while the stock variables (KL_t, $PRLA_t$, KC_t, $PRAA_t$, and so on) are always defined, in the calculations that follow, as the arithmetical mean of these variables at 31 December for the years t and $t-1$. The stock variables are thus defined in such a way as to obtain an estimation of the average stock over the year.

Return on Assets

In attempting to measure the net return of the various investments, we encounter the problem of correctly distributing the EDC's administrative expenses among its three major activities – loans, insurance, and investments. As a consequence, the gross return is estimated first, without taking these expenses into account. The net return is estimated by distributing the administrative expenses through two methods: the first is based on the shares of gross revenues attributable to the corporation's various activities, while the second uses the proportions of EDC staff assigned to each activity. Both methods are described in detail later. Of course, the gross rate of return overestimates the EDC's actual profitability; as such, it represents an upper limit that is independent of any arbitrary assumption about administrative expenses.

Gross Return on Assets

Let us first describe the gross returns. The earnings on export loans consist, of course, of the interest and fees earned less the losses incurred. However, losses can be measured in at least two different ways. The first consists in subtracting loan writeoffs from loans receivable in any given year, while the second uses the provision for loan losses included in the corporate accounts, which constitutes an accounting assessment of anticipated losses on loans outstanding at 31 December. Although the first method is preferable because in principle it is based on a less subjective assessment of losses, we have to settle for the second method because the EDC has never written off an export loan, preferring to reschedule overdue loans. The loss-adjusted earnings associated with these two methods respectively, are:

$$RL_t^{(1)} = IL_t,$$[4]

$$RL_t^{(2)} = IL_t - PRL_t.$$

The concepts of invested capital corresponding respectively to each of these earnings measures are:

$$KL_t^{(1)} = KL_t,$$

$$KL_t^{(2)} = KL_t - PRLA_t.$$

The return on invested capital is thus measured by:

$$rL_t^{(1)} = RL_t^{(1)}/KL_t^{(1)},$$

$$rL_t^{(2)} = RL_t^{(2)}/KL_t^{(2)}.$$

The return on short-term investments is defined in the same manner by the expression:

$$rC_t = IC_t/KC_t.$$

Since these investments are virtually risk-free, no provision for losses is set aside and, of course, none of these investments has ever been written off. Export loans and investments might also be considered complementary activities, with export loans opening the door to short-term investment activities (which are more profitable financially than export loans). To gain some idea of how sensitive the measurements of the return on export loans are to this approach, we estimate rates of return based on the sum of loans and investments:

$$rLC_t^{(1)} = RLC_t^{(1)}/KLC_t^{(1)},$$

$$rLC_t^{(2)} = RLC_t^{(2)}/KLC_t^{(2)},$$

where:

$$RLC_t^{(1)} = RL_t^{(1)} + IC_t,$$

$$RLC_t^{(2)} = RL_t^{(2)} + IC_t,$$

$$KLC_t^{(1)} = KL_t^{(1)} + KC_t,$$

$$KLC_t^{(2)} = KL_t^{(2)} + KC_t.$$

Insurance activities are quite different from loan activities in that they are not a simple investment activity. Although financial capital is required for such operations, it is mixed in with other EDC assets, particularly investments. At best, it can reasonably be stated that the capital required is at least equal to the accumulated provisions for insurance claims. In view of the considerable uncertainty in measuring the capital invested in insurance activities, no rate of return on capital has been estimated. Nevertheless, it is interesting to examine the premiums and fees earned after deduction of losses – that is, (net) claim settlements or annual provisions for claims in the EDC's corporate accounts; this produces the two following concepts of earnings (adjusted for losses):

$$RA_t^{(1)} = VA_t - PEA_t,$$

$$RA_t^{(2)} = VA_t - PRA_t.$$

These series are assembled in Table D-9. The proportion of total insurance premiums and fees that these earnings represent – a fairly common concept in this type of activity – is also estimated.

Since export loans and insurance are the EDC's major activities (as compared with investment) and since they can be considered as complementary, it is interesting to measure the rate of return on both activities combined. As indicated above, the primary problem is in measuring the capital required for insurance activities. To solve this, the accumulated provisions for claims are assumed to constitute an estimation of this capital, and they are added to the loans receivable.[5] Measuring losses once again (on loans and insurance), either as actual losses or as loss provisions, we then obtain the following earnings concepts:

$$RLA_t^{(1)} = RL_t^{(1)} + RA_t^{(1)},$$

$$RLA_t^{(2)} = RL_t^{(2)} + RA_t^{(2)}.$$

The corresponding capital concepts are:

$$KLA_t^{(1)} = KL_t^{(1)} + PRAA_t,$$

$$KLA_t^{(2)} = KL_t^{(2)} + PRAA_t.$$

Consequently, the rates of return are given by the expressions:

$$rLA_t^{(1)} = RLA_t^{(1)}/KLA_t^{(1)},$$

$$rLA_t^{(2)} = RLA_t^{(2)}/KLA_t^{(2)}.$$

In addition, to ensure that the rate of return on export loans and insurance will be overestimated, we measure it without including the accumulated provisions for insurance claims in the capital variable; this is equivalent to assuming that the capital required for insurance activities is nil. The measures of the rate of return in this case are:

$$rLA_t^{(3)} = RLA_t^{(1)}/KL_t^{(1)},$$

$$rLA_t^{(4)} = RLA_t^{(2)}/KL_t^{(2)}.$$

Finally, it is only natural to examine together the three activities analysed separately above, since they are largely complementary. The inclusion of short-term investments may, however, bias the estimated return on export-assistance activities, which are the EDC's specific objective. These earnings, adjusted for losses, are provided by one of the following expressions, depending on whether actual losses or loan provisions are used:

$$R_t^{(1)} = RL_t^{(1)} + RA_t^{(1)} + IC_t,$$

$$R_t^{(2)} = RL_t^{(2)} + RA_t^{(2)} + IC_t.$$

The capital stocks and rates of return associated with these earnings are:

$$K_t^{(1)} = KL_t^{(1)} + KC_t,$$

$$K_t^{(2)} = KL_t^{(2)} + KC_t,$$

$$r_t^{(1)} = R_t^{(1)}/K_t^{(1)},$$

$$r_t^{(2)} = R_t^{(2)}/K_t^{(2)}.$$

Finally, since $K_t^{(1)}$ and $K_t^{(2)}$ do not include "other assets," which appear on the balance sheet and consist primarily of costs paid in advance (debt discount and issue expenses), we want to observe the effect of including this element in the capital; the following alternative rates for all activities taken together is therefore estimated:

$$r_t^{(3)} = R_t^{(1)}/KT_t^{(1)},$$

$$r_t^{(4)} = R_t^{(2)}/KT_t^{(2)},$$

where:

$$KT_t^{(1)} = K_t^{(1)} + KR_t,$$

$$KT_t^{(2)} = K_t^{(2)} + KR_t,$$

and KR_t represents the "other assets." The values of these various gross rates of return for 1970-80 are shown in Table D-5.

Net Return on Assets

The gross return on assets obviously overestimates the return on investment, since operating expenses have not been deducted. To obtain the net return, we need only subtract these costs. However, the data available on EDC administrative expenses are not broken down by individual activity.

Two methods can be used to separate these costs for the three major types of EDC activities. The first assumes that administrative expenses are proportional to the gross earnings from each activity and distributes them in direct proportion to earnings. In specific terms, if total earnings are defined as:

$$Y_t = IL_t + VA_t + IC_t,$$

then administrative expenses are distributed as follows:

$$FL_t = \left(\frac{IL_t}{Y_t}\right) F_t,$$

$$FA_t = \left(\frac{VA_t}{Y_t}\right) F_t,$$

$$FC_t = \left(\frac{IC_t}{Y_t}\right) F_t.$$

The second method assumes that administrative expenses are proportional to the number of employees assigned to each activity. In this case, we define:

$$FL_t = \left(\frac{EL_t}{E_t}\right) F_t,$$

$$FA_t = \left(\frac{EA_t}{E_t}\right) F_t,$$

$$FC_t = \left(\frac{EC_t}{E_t}\right) F_t,$$

where EL_t, EA_t, and EC_t are the number of employees assigned to the EDC's loan, insurance, and investment activities, respectively; and:

$$E_t = EL_t + EA_t + EC_t.$$

This distribution is estimated with approximate data provided by the EDC.[8]

Once the administrative expenses are determined, the gross returns are converted into net returns by subtracting the corresponding costs from each earnings component. To avoid any ambiguity, all of the necessary operations are listed below:

$$\overline{RL}_t^{(1)} = RL_t^{(1)} - FL_t, \quad \overline{RL}_t^{(2)} = RL_t^{(2)} - FL_t,$$

$$\overline{rL}_t^{(1)} = \overline{RL}_t^{(1)}/KL_t^{(1)}, \quad \overline{rL}_t^{(2)} = \overline{RL}_t^{(2)}/KL_t^{(2)},$$

$$\overline{RC}_t = IC_t - FC_t,$$

$$\overline{rC}_t = \overline{RC}_t/KC_t,$$

$$\overline{RLC}_t^{(1)} = \overline{RL}_t^{(1)} + \overline{RC}_t, \quad \overline{RLC}_t^{(2)} = \overline{RL}_t^{(2)} + \overline{RC}_t,$$

$$\overline{rLC}_t^{(1)} = \overline{RLC}_t^{(1)}/KLC_t^{(1)}, \quad \overline{rLC}_t^{(2)} = \overline{RLC}_t^{(2)}/KLC_t^{(2)},$$

$$\overline{RA}_t^{(1)} = RA_t^{(1)} - FA_t, \quad \overline{RA}_t^{(2)} = RA_t^{(2)} - FA_t,$$

$$\overline{RLA}_t^{(1)} = \overline{RL}_t^{(1)} + \overline{RA}_t^{(1)}, \quad \overline{RLA}_t^{(2)} = \overline{RL}_t^{(2)} + \overline{RA}_t^{(2)},$$

$$\overline{rLA}_t^{(1)} = \overline{RLA}_t^{(1)}/KLA_t^{(1)}, \quad \overline{rLA}_t^{(2)} = \overline{RLA}_t^{(2)}/KLA_t^{(2)},$$

$$\overline{rLA}_t^{(3)} = \overline{RLA}_t^{(1)}/KL_t^{(1)}, \quad \overline{rLA}_t^{(4)} = \overline{RLA}_t^{(2)}/KL_t^{(2)},$$

$$\overline{R}_t^{(1)} = R_t^{(1)} - F_t, \quad \overline{R}_t^{(2)} = R_t^{(2)} - F_t,$$

$$\overline{r}_t^{(1)} = \overline{R}_t^{(1)}/K_t^{(1)}, \quad \overline{r}_t^{(2)} = \overline{R}_t^{(2)}/K_t^{(2)},$$

$$\overline{r}_t^{(3)} = \overline{R}_t^{(1)}/KT_t^{(1)}, \quad \overline{r}_t^{(4)} = \overline{R}_t^{(2)}/KT_t^{(2)}.$$

Since there is good reason to believe that administrative expenses associated with investments are minimal, a net rate of return after deduction of all administrative expenses is estimated for loan and insurance activities taken together:

$$\overline{\overline{RLA}}_t^{(1)} = RL_t^{(1)} + RA_t^{(1)} - F_t,$$

$$\overline{\overline{RLA}}_t^{(2)} = RL_t^{(2)} + RA_t^{(2)} - F_t,$$

$$\overline{\overline{rLA}}_t^{(1)} = \overline{\overline{RLA}}_t^{(1)}/KLA_t^{(1)},$$

$$\overline{\overline{rLA}}_t^{(2)} = \overline{\overline{RLA}}_t^{(2)}/KLA_t^{(2)}.$$

The results of these various operations are reported in Tables D-6 and D-7.

Net Return on Government Capital

As mentioned earlier, the return on government capital is the return earned on Canadian government funds (equity and loans) assigned to the EDC. To measure losses on loans and insurance, we once again have the option of using loans actually written off and claim settlements, or the provisions set up for these purposes. In the first case, the relevant return is defined as:

$RG_t^{(1)}$ = EDC net profits
+ interest paid to the Government of Canada
+ annual provision for losses on loans
+ annual provision for insurance claims
– (claims paid less claims recovered)
– (loans written off less loans recovered)

or, using the symbols already defined:

$$RG_t^{(1)} = BN_t + IG_t + PRL_t + PRA_t - PEA_t - PEL_t,$$[7]

while capital is defined as:

$KG_t^{(1)}$ = total assets (including accumulated provisions for losses and claims)
− total funds borrowed (including accrued interest on debt)
+ funds borrowed from Government of Canada (including accrued interest)
− other liabilities (except the Canada Account)
$= K_t - D_t + DG_t - (DR_t - CA_t)$.[8]

The rate of return is thus measured by:

$$rG_t^{(1)} = RG_t^{(1)}/KG_t^{(1)}.$$

In the second case, when provisions for losses on earnings and capital are excluded, we obtain:

$RG_t^{(2)}$ = net profits
+ interest paid to the Government of Canada
$= BN_t + IG_t$

$KG_t^{(2)}$ = total assets
− total funds borrowed
+ funds borrowed from Canada
− other liabilities (except the Canada Account)
− accumulated provisions for loan losses
− accumulated provisions for insurance claims
$= K_t - D_t + DG_t - (DR_t - CA_t) - PRLA_t - PRAA_t$

which gives the following rate of return:

$$rG_t^{(2)} = RG_t^{(2)}/KG_t^{(2)}.$$

Differences between Rates of Return, Cost of Capital, and EDC Subsidies

In its most general sense, a subsidy is defined as a positive difference between the cost of capital to the EDC and the price that the corporation charges to its borrowers. In the preceding sections, we studied prices using various concepts of return. The cost of capital is now measured through two distinct approaches: one based on the financial cost of the funds used, the other on their social cost.

Measuring Subsidies by the Financial Cost of Capital

Since export financing is an investment expenditure, one naturally assumes that it is done through issues of pubic debt. Consequently, a simple and direct way to measure the cost of capital invested would be to estimate the average interest rate paid by the Canadian government on its debt. We have estimated this rate for each year between 1970 and 1980, using information provided by the federal Department of Finance. The public debt is subdivided into four types of instruments: treasury bonds, negotiable bonds (with terms to maturity of one year or more), Canada Savings Bonds, and foreign debt. The average rate of interest paid on the public debt (rP_t) is obtained by constructing a weighted average of the (average) rates prevailing for each of these instruments. The weighting factors are the proportions of total debt that correspond to each of these instruments. The results of the calculations are shown in Tables D-1 and D-2.

A rate of subsidization is then obtained by estimating the difference between the financial cost of the public debt (just described) and the rates of return described in the preceding section. The value of the subsidy associated with each rate of return is obtained by multiplying the rate of subsidization by the corresponding amount of capital; thus, if $rL_t^{(1)}$ is used, the subsidy is given by $(rP_t - rL_t^{(1)})\,KL_t^{(1)}$. The subsidy is also converted into constant dollars using the GNE price deflator (1980 = 100). The main results are reported in Tables D-11, D-13, and D-15.[9]

Measuring Subsidies by the Social Cost of Capital

The social cost of capital is equivalent to the output that would have been obtained had the funds been used in the private sector. Generally speaking, capital may be obtained from three sources: a reduction in private investment, a reduction in private consumption, and foreign savings. The social cost of the funds used is a weighted average of the cost of each of these components (based on their relative importance): the before-tax rate of return on displaced private investment; the after-tax rate of return on private savings (corresponding to the reduction in consumption); and the after-tax rate of return that must be paid to foreign investors. The general methodology for measuring the social cost of resources was developed by Harberger (1969a, 1969b) and applied to Canada by Jenkins (1977), Burgess (1981), and McCaughey, Mintz, and Carrière

(1981). The concept of social cost is discussed in detail by these authors.[10]

The rates and amounts of subsidization have been estimated for three levels of social cost: 10, 7, and 4 per cent. The rates are expressed in real terms, after adjustment for inflation. The 10 per cent rate, taken from Jenkins, is based on data covering the years 1965-74. Jenkins estimated that 75 per cent of government borrowing is financed by a reduction in private investment; 20 per cent, by foreign savings; and 5 per cent, by an increase in domestic savings. The social cost of the funds associated with these three sources works out to 11.45 per cent, 6.11 per cent, and 4.14 per cent, respectively. Burgess argued that Jenkins had made several assumptions that tended to overestimate the cost of capital. After making some adjustments (including a reduction in the social cost of the displacement of private investment to 9.5 per cent and an increase in the shares of foreign and private savings), Burgess obtained an estimate of about 7 per cent. This figure is quite close to the estimate (7.26 per cent) obtained by McCaughey, Mintz, and Carrière for 1974-78, using 6.54 per cent for private investment, 9.26 per cent for foreign savings, and 4.11 per cent for domestic savings, with weighting factors of 0.45, 0.40, and 0.15, respectively. By changing one element in their calculations (the rate of return on equity in the economy), based on an estimation by Bélanger and McIlveen (1980) and aimed at taking into account the effects of inflation, McCaughey, Mintz, and Carrière also obtained a rate of 4 per cent (nominal rate, 12.74 per cent; real rate, 3.96 per cent). Finally, it is interesting to note that Grubel (1974) measured the real rate of return to U.S. holders of Canadian bonds at about 4 per cent over the 1960-69 period. Therefore, the figures of 10, 7, and 4 per cent provide estimations of the social cost of capital invested in the EDC that cover a wide range of assumptions. It should again be noted that the values based on 7 and 4 per cent provide particularly relevant results when all EDC funds are assumed to be borrowed from abroad – a situation that has been increasingly close to reality in recent years.

To compare the rates of return calculated with these estimates of social cost, the rates are first converted into real terms by subtracting the rates of inflation.[11] The main results are given in Table D-10. The corresponding rates of subsidization are shown in Table D-12. The amounts of subsidization in current dollars appear in Table D-14, while the same figures in constant dollars (1980 = 100) are found in Table D-16.[12]

Analysis of the Results

With the concepts now defined and the capital returns and costs measured, the results can now be analysed.

First, we turn to the rates of return on assets (Tables D-5 to D-7). One finding is immediately obvious: the net rates of return differ little from the gross rates, the latter exceeding the former by no more than 0.5 per cent. The net rates are also quite similar to each other, regardless of whether the administrative expenses are distributed in accordance with the gross revenues for the various activities or on the basis of the employees assigned to these activities. Consequently, our analysis of the results deals primarily with the net returns, particularly those based on the distribution of administrative expenses based on the number of employees (Table D-7). This second method of assigning costs seems more plausible, particularly for investment activities that require only a few clerical employees.[13]

The most interesting series is obviously that for export loans. First, it can be seen that the gross and net rates of return on loans rose, slowly but steadily, from 5 per cent to slightly more than 8 per cent between 1970 and 1980. The average for the period is about 7 per cent. Second, it can also be seen that, for the "loans and insurance" category, the various definitions of the rate of return studied lead to very similar results. In addition, the general behaviour of this aggregate is very similar to that of "export loans," rising steadily from about 5.5 per cent to almost 8.5 per cent; this rate is generally a little higher than that for loans. This suggests that insurance activities have a positive impact on the corporation's general viability. The rate of return for investments is much more erratic, sometimes higher and sometimes lower than that for export loans; the sharpest increase occurred in 1979 and 1980, when the rate jumped to 15 per cent. For all activities (and therefore assets), again very similar results were obtained for the various definitions used. A fairly steady rise in the rate of return can be observed, from slightly less than 6 per cent to just over 9 per cent; this rate is generally a little greater than that for loans, except in 1979 and 1980. The recent turnaround is explained by the sharp increase in interest rates on financial investments.

Looking at the net rate of return on government capital (Table D-8), we find that the two definitions examined above provide similar figures. The rates of return obtained are fairly close to those observed for the net return on assets, except in 1980 once again, when a sharp drop of about 2 per cent occurred. This apparently was caused by an increase in the corporation's borrowing costs.

Let us now turn to insurance activities (Table D-9). Because our measurement of the capital assigned to this activity is too imprecise, a rate of return cannot be estimated for this variable. It is clear, however, that earnings from premiums and fees always exceeded claim settlements (after deduction of recovered claims) except in 1971 and 1973, and they also exceeded the annual provision deducted for this purpose from the operating account. The same is also true when administrative expenses are deducted from earnings. In fact, if the costs attributable to insurance are determined on the basis of the number of employees (which substantially increases the insurance costs), there is still only one additional year (1980) in which claims exceeded the premiums collected. (If losses are estimated on the basis of the provision for losses, then 1979 must also be added.) Finally, when the ratios of net income to premiums collected is examined, over the 1970-80 period the average value under the most pessimistic estimate is 19.9 per cent on the basis of net settlements and 12.2 per cent on the basis of the provision for losses. Therefore, although the operating costs for insurance activities cannot be accurately determined, it is difficult not to conclude that they are generally very profitable for the EDC.

As already indicated, whether one uses actual losses (on loans or insurance; $rL_t^{(1)}$, for example) or the provision set aside for losses on the EDC's balance sheet ($rL_t^{(2)}$), that has very little impact on the rate of return obtained. Similarly, we find little difference between the gross and net rates of return for administrative expenses (regardless of the method used to distribute them among the corporation's various activities). Consequently, the amounts of subsidization obtained by these various methods are quite similar. Keeping this in mind, the following discussion deals primarily with the figures based on losses as measured by loss provisions and on two definitions of the rate of return – namely, the rate of return after deduction of administrative expenses (based on the number of employees) and the net rate of return on government capital. The complete results can be found in a technical paper [Dufour, Racette, and Raynauld (1982)].

The rates of return examined up to this point were nominal rates. Before proceeding with the subsidy estimates, the real rates of return on investments should be examined briefly (Table D-10). Because the rate of inflation varied considerably over the period under study, the real rates of return for this period appear quite erratic and show no clear trend. Nonetheless, they are generally quite close to zero, sometimes positive and sometimes negative. The real average rate of return on loans is negative (–1.5 per cent).

If we turn to the results in Table D-11, we find that the financial cost of funds exceeds the return obtained by about 0.5 per cent, on average, over the period under study. Thus the government, through the EDC, re-lends the funds it has borrowed at a slightly lower cost than what it must pay. However, it must be pointed out that the situation seemed to deteriorate over the period; the average difference (for loans) for 1975-80 was 1.1 per cent, but it had risen to 1.6 per cent by 1980. The average subsidy in 1980 dollars (Table D-15) was $13.5 million per year (for a total of $148.5 million); in 1980 alone, it amounted to $46.5 million. The EDC's export-loan operations therefore appear to run a small deficit, but one that has been growing in recent years. As we shall see later, however, the subsidy involved seems quite small, given the amounts of the loans.

We now examine the social, rather than the financial, cost of capital (Table D-12). As in the case of the real rates of return, the differences (which measure subsidization as a percentage of the amounts involved) varied considerably over the period. For export loans, the average difference from 1970 to 1980 between the cost of capital and its net return was 11.5 per cent, based on a social opportunity cost of 10 per cent; 8.5 per cent, based on a cost of 7 per cent; and 5.5 per cent, based on a cost of 4 per cent (using gross rates of return would reduce these differences by only 0.4 points). Recall that the opportunity cost of capital is expressed in real terms. The difference referred to here is therefore the difference between this real cost – say, 10 per cent – and the real rate of return on capital invested by the EDC. Since the net real rate of return on export loans is –1.5 per cent, the difference in this case is 11.5 per cent. In 1980, these rates were 12.3, 9.3, and 6.3 per cent, respectively; the corresponding amounts of subsidization were $360.8, $273.1, and $185.4 million (Table D-14). This reveals a very strong growth in the amounts of subsidization over the period. When the subsidies are expressed in 1980 dollars (Table D-16), they average $183.1 million per year (for a total of $2,014.1 million over 11 years), based on the 10 per cent cost; $135.5 million (for a total $1,490.5 million), based on the 7 per cent cost; and $87.9 million (for a total $966.9 million), based on the 4 per cent cost.

The results for the loans and insurance subset differ very little from those for loans alone. The average difference in net return (estimated from $\overline{rLA}_t^{(2)}$) for the 1970-80 period is 11.5, 8.5, or

5.5 per cent, depending on the opportunity cost used. Of course, the amounts of subsidization are also similar (Tables D-14 and D-16).

The average difference for investment activity between 1970 and 1980 is 9.9, 6.9, or 3.9 per cent, again based on the opportunity cost used. The average amounts of subsidization (in 1980 dollars) are $16.8 million, $11.0 million, and $5.3 million, respectively, all of which are negligible when compared with the loan amounts.[14] For the loans and investments subgroup, the average differences are 11.3 per cent, 8.3 per cent, and 5.3 per cent, respectively, while the corresponding average amounts of subsidization (in 1980 dollars) are $199.9 million, $146.6 million, and $93.2 million. These amounts are only slightly larger than those obtained for loans alone.

Finally, let us examine the net return on all assets. The average difference in net return for the 1970-80 period is 11.2 per cent, 8.2 per cent, or 5.2 per cent, depending on the opportunity cost used (for the gross returns, these differences are lower by 0.5 points). In 1980, in particular, these rates were 11.2 per cent, 8.2 per cent, and 5.2 per cent, respectively,[15] and the corresponding amounts of subsidization were $385.7 million, $282.8 million, and $179.9 million (Table D-14). In addition to a sharp growth in subsidization over the 1970-80 period, the average subsidy (in 1980 dollars) is $198.8 million (for a total of $2,186.8 million over 11 years), $145.4 million (for a total of $1,599.4 million), or $92.1 million (for a total of $1,013.1 million), based on an opportunity cost of 10, 7, or 4 per cent, respectively. These results differ only marginally from those obtained for export loans alone.

We now examine the results based on the net return on capital invested by the federal government. Using $rG_t^{(2)}$, we find that the average difference between 1970 and 1980 is 11.7 per cent, 8.7 per cent, or 5.7 per cent, depending on the opportunity cost used (Table D-12). A sharp increase occurred in 1980, to 14.0 per cent, 11.0 per cent, and 8.0 per cent, respectively. The average subsidy for the entire period (in 1980 dollars) is $148.0 million (for a total of $1,628.0 million over 11 years), $110.4 million (for a total of $1,214.4 million), or $72.8 million (for a total of $800.8 million), depending on the opportunity cost used. In 1980, these amounts were $170.2 million, $133.8 million, and $97.4 million, respectively.

Our study of the EDC's operations on its own behalf concludes with a summary of our major findings. First, the EDC appears to lend at a slightly lower rate than that at which the Canadian government can borrow. Even in the financial sense of the term, therefore, it provides a subsidy, which does not, however, appear to be very large (about 1 per cent of all loans). Second, the situation is different for the social opportunity cost of the capital. Table 4-1 shows the average rates of return (nominal and real) over the 1970-80 period, as well as the rates and amounts of subsidization that we find the most significant. In addition, the same data are grouped in Table 4-2 for 1980. The rate of return on export loans was about -1 per cent in real terms, suggesting rates of subsidization between 5 and 11 per cent, depending on the opportunity cost used; and the amount of subsidization ranged from $80 million (4 per cent opportunity cost) to $180 million (10 per cent opportunity cost) a year (in 1980 dollars). Third, although it is fairly difficult to measure the viability of insurance activities, they appear to be considerably more profitable than export loans. Fourth, short-term investment activities are also generally more profitable than export loans. The difference proved particularly large in the last two years of the period (1979 and 1980), suggesting that short-term investments have been a major factor in keeping the corporation out of the red in recent years.

Consolidated Activities: The EDC Balance Sheet and the Canada Account

We have seen how the preceding results are affected when the EDC's corporate balance sheet is consolidated with that of the accounts administered for the Government of Canada. In accounting terms, the Canada Account is much less detailed than the corporation's own balance sheet; for example, it does not include any net income or provision for losses. It is still possible, however, to determine the rate of return on assets and the corresponding amount of subsidization.

The variables drawn from the accounts administered for Canada, which we use for this consolidation, are:

ILD_t = export-loan interest and fees earned;
VAD_t = earnings from premiums and fees for export insurance and for guarantees on foreign investments;
$PEAD_t$ = claims paid less claims recovered;
FD_t = administrative expenses;
KLD_t = loans receivable (including accrued interest and fees).

The provisions for losses on loans and insurance are presumed to be nil. The rates of return and amounts of subsidization are estimated in the same manner as for the EDC corporate account, with the following changes:

Table 4-1

Rate of Return and Rates and Amounts of Subsidization, EDC, 1970-80 Average

	Nominal rate	Real rate	Rate of subsidization[1]			Amount of subsidization			Total subsidization, 1970-80		
			10%	7%	4%	10%	7%	4%	10%	7%	4%
			(Per cent)					($1980 millions)			
Export loans[2]											
Gross return	7.2	-1.1	11.1	8.1	5.1	177.4	129.8	82.2	1,951.4	1,427.8	904.2
Net return[3]	6.9	-1.5	11.5	8.5	5.5	183.1	135.5	87.9	2,014.1	1,490.5	966.9
Loans and insurance[4]											
Gross return	7.5	-0.9	10.9	7.9	4.9	175.0	127.1	79.2	1,925.0	1,398.1	871.2
Net return	6.9	-1.5	11.5	8.5	5.5	183.8	135.9	88.0	2,021.8	1,494.9	968.0
All activities[5]											
Gross return	7.7	-0.7	10.7	7.7	4.7	189.5	136.2	82.8	2,084.5	1,498.2	910.8
Net return	7.1	-1.2	11.2	8.2	5.2	198.8	145.4	92.1	2,186.8	1,599.4	1,013.1
Government capital[6]	6.7	-1.7	11.7	8.7	5.7	148.0	110.4	72.8	1,628.0	1,214.4	800.8

1 Difference between the opportunity cost and the real rate of return.
2 Based on $rL_t^{(2)}$.
3 Administrative expenses based on the number of employees.
4 Based on $rLA_t^{(2)}$.
5 Based on $r_t^{(2)}$.
6 Based on $rG_t^{(2)}$.
SOURCE Estimates by the authors.

Table 4-2

Rate of Return and Rates and Amounts of Subsidization, EDC, 1980

	Nominal rate	Real rate	Rate of subsidization[1]			Amount of subsidization		
			10%	7%	4%	10%	7%	4%
			(Per cent)			($1980 millions)		
Export loans[2]								
Gross return	8.6	-2.0	12.0	9.0	6.0	350.3	262.6	174.9
Net return[3]	8.3	-2.3	12.3	9.3	6.3	360.8	273.1	185.4
Loans and insurance[4]								
Gross return	8.9	-1.8	11.8	8.8	5.8	344.8	256.8	168.8
Net return	8.4	-2.3	12.3	9.3	6.3	359.9	271.9	183.9
All activities[5]								
Gross return	9.9	-0.8	10.8	7.8	4.8	369.7	266.8	163.9
Net return	9.4	-1.2	11.2	8.2	5.2	385.7	282.8	179.9
Government capital[6]	6.6	-4.0	14.0	11.0	8.0	170.2	133.8	97.4

1 Difference between the opportunity cost and the real rate of return.
2 Based on $rL_t^{(2)}$.
3 Administrative expenses based on the number of employees.
4 Based on $rLA_t^{(2)}$.
5 Based on $r_t^{(2)}$.
6 Based on $rG_t^{(2)}$.
SOURCE Estimates by the authors.

- replace IL_t with $IL_t + ILD_t$;
- replace VA_t with $VA_t + VAD_t$;
- replace PEA_t with $PEA_t + PEAD_t$;
- replace KL_t with $KL_t + KLD_t$.

In addition, the administrative expenses FD_t are distributed on the basis of the same two criteria. The first is the gross-receipts method, which gives:

$$FLD_t = (ILD_t / YD_t)\, FD_t$$

$$FAD_t = (VAD_t / YD_t)\, FD_t$$

where $YD_t = ILD_t + VAD_t$; FLD_t is that part of FD_t attributable to loans; and FAD_t is that attributable to insurance. The second method is based on the number of employees (with the same distribution as for the EDC corporate account), which gives:

$$FLD_t = (EL_t/ELA_t)\,FD_t$$

$$FLA_t = (EA_t/ELA_t)\,FD_t$$

where $ELA_t = EL_t + EA_t$.[16] These are then added to the expenses in the corporate account. The additional data for these calculations appear in Table D-4.

The consolidation of these operations has very little impact on the rates of return obtained, with the differences being in the order of 0.1 per cent.[17] Nonetheless, since the consolidated assets are larger,

Table 4-3

Rate of Return and Rates and Amounts of Subsidization, Consolidated Activities, EDC Corporate and Canada Accounts, 1970-80 Average

	Nominal rate	Real rate	Rate of subsidization[1]			Amount of subsidization			Total subsidization, 1970-80		
			10%	7%	4%	10%	7%	4%	10%	7%	4%
	(Per cent)					($1980 millions)					
Export loans[2]											
Gross return	7.3	-1.1	11.1	8.1	5.1	195.4	142.9	90.3	2,149.4	1,571.9	933.3
Net return[3]	6.9	-1.5	11.5	8.5	5.5	202.1	149.5	97.0	2,223.1	1,644.5	1,067.0
Loans and insurance[4]											
Gross return	7.6	-0.8	10.8	7.8	4.8	191.1	138.2	85.4	2,102.1	1,520.2	939.4
Net return	7.0	-1.4	11.4	8.4	5.4	201.2	148.3	95.5	2,213.2	1,631.3	1,050.5
All activities[5]											
Gross return	7.8	-0.6	10.6	7.6	4.6	205.6	147.3	89.0	2,261.6	1,620.3	979.0
Net return	7.2	-1.1	11.1	8.1	5.1	216.2	157.9	99.6	2,378.2	1,736.9	1,095.6

1 Difference between the opportunity cost and the real rate of return.
2 Based on $rL_t^{(2)}$.
3 Administrative expenses based on the number of employees.
4 Based on $rLA_t^{(2)}$.
5 Based on $r_t^{(2)}$.
SOURCE Estimates by the authors.

Table 4-4

Rate of Return and Rates and Amounts of Subsidization, Consolidated Activities, EDC Corporate and Canada Accounts, 1980

	Nominal rate	Real rate	Rate of subsidization[1]			Amount of subsidization		
			10%	7%	4%	10%	7%	4%
			(Per cent)			($1980 millions)		
Export loans[2]								
Gross return	8.7	-1.9	11.9	8.9	5.9	415.6	311.2	206.8
Net return[3]	8.3	-2.3	12.3	9.3	6.3	428.3	323.9	219.5
Loans and insurance[4]								
Gross return	8.9	-1.7	11.7	8.7	5.7	408.2	303.5	198.9
Net return	8.4	-2.2	12.2	9.2	6.2	426.6	321.9	217.2
All activities[5]								
Gross return	9.8	-0.9	10.9	7.9	4.9	433.1	313.5	193.9
Net return	9.3	-1.3	11.3	8.3	5.3	452.3	332.8	213.2

1 Difference between the opportunity cost and the real rate of return.
2 Based on $rL_t^{(2)}$.
3 Administrative expenses based on the number of employees.
4 Based on $rLA_t^{(2)}$.
5 Based on $r_t^{(2)}$.
SOURCE Estimates by the authors.

the amounts of subsidization are also slightly higher. We need not discuss these results in detail here.[18] Table 4-3 does, however, give the average rates of return (gross and net) and the amounts of subsidization for the major categories (export loans, loans and insurance, and all activities). The same information for 1980 is reported in Table 4-4. We simply point out that the average subsidy for export loans amounts to $202.1 million (a total of $2,223.1 million over the period) when we use 10 per cent as the opportunity cost; $149.5 million (a total of $1,644.5 million), based on the 7 per cent cost; and $97.0 million (a total of $1,067.0 million), based on the 4 per cent cost. In 1980 alone, this subsidy amounted to $428.3 million, $323.9 million, or $219.5 million, depending on the opportunity cost used. Overall, the conclusions developed at the end of the preceding section apply to all operations administered by the EDC.

5 A Tentative Assessment

The Canadian government decided in 1944 that it should promote exports, and it has persisted in that commitment ever since. The resources devoted to this effort have increased each year, following the well-established pattern of all government spending programs. In 1980, the EDC had 500 employees and "consumed" or used almost $4 billion, which obviously could have been invested in something other than exports.

It must therefore be assumed that the government was and still is attempting to achieve objectives or obtain benefits that would not be possible without its intervention. As a consequence, it is also prepared to incur certain costs in exchange for those benefits. The essential goal of our study was to identify and measure these benefits and costs, in order to determine whether government intervention has produced the results that Parliament expected when it first made, and thereafter renewed, its commitment to export assistance.

While we have not produced a definitive answer to our basic question, the preceding chapters have provided some elements of information, which we now wish to summarize and assess.

From an analytical viewpoint, the EDC's actions are aimed at lowering the selling price of Canadian exports. To achieve this, the EDC sells insurance policies to exporters and reduces the risks inherent in export activity. The exporter can then lower his selling price to reflect the smaller risk margin. The corporation also provides medium- and long-term export credit at fixed rates. Compared with cash sales, the granting of credit represents an implicit price reduction.[1] In turn, lower prices will increase exports as long as the supply and demand elasticities are not nil. Since sales are made on credit, however, they do not have the same impact on the balance of payments as cash sales. The inflow of capital to cover these exports is spread out over a certain period in accordance with the terms of the loans.[2]

The question to be raised about EDC activities may be a bit offensive, but it must be asked: Do these activities benefit the Canadian economy? The answer is by no means clear. In principle, the market, if left alone, should generate all of the services now provided by the EDC. Consequently, the EDC's operations can benefit all Canadians only if they provide services that are additional (or "incremental") to those of the market.[3] Otherwise, they would simply shift the focus of activity from the private to the public sector, with no net increase in national output. Under such circumstances, the EDC's activities would produce no social benefits even if the economic return were just as great as it would be in the private sector.

It is therefore crucial to determine whether or not the EDC is substituting itself for the private sector, and whether the benefits obtained are unique to the EDC's activities or are the same as those available without EDC intervention.

These benefits can be subdivided into two major categories: those associated with efficiency considerations, and those associated with considerations of redistribution. Government intervention is likely to increase the market's efficiency when externalities are present – that is, when market decisions fail to take some benefits or costs into account – or when various market imperfections or failures exist, such as imperfect competition or other distortions, which are often largely caused by government itself. We are referring here to income taxes and subsidies of all types, regulations and price controls, and customs duties.

History also shows that governments are often prepared to sacrifice efficiency in return for supposedly more equitable resource and income distribution. A measure that favours some groups over others, such as the poor over the rich, may therefore be considered beneficial to society as a whole.

There is general agreement that these social efficiency and distribution benefits do carry a price. Common sense therefore requires that government seek the cheapest methods of achieving its objectives in order to avoid flagrantly wasteful practices.

Accordingly, one must attack the most direct and immediate sources of a problem.[4] This principle rules out correcting a market distortion, for example, by introducing a new distortion in another, otherwise balanced market. The more specific question is whether, in the presence of an acknowledged market failure, the correction should come from the EDC or through other means more directly linked to the source of the failure.

These matters are examined briefly in the context of Parliament's stated objectives and of the export-financing practices commonly followed in Canada and abroad.

Economic Mechanisms

Before examining the various benefits expected from EDC operations in Canada, we shall attempt to identify the impact suggested by economic analysis. To this end, a few assumptions are made that, while they may oversimplify matters, will help us to better understand the mechanisms involved.

Assume that the EDC lends $100 million to a foreign firm at 8 per cent interest for ten years to finance an order placed with a Canadian exporter. Assume, also, that the return on private investment before taxes is 15 per cent. What are the economic consequences of the EDC's loan?

The analysis can be based on real or financial flows, but since the real world is the same in both cases, the conclusions lead to the same results. The general state of the economy and, specifically, medium- or long-term conditions – since EDC operations are assumed to be continuous – play a central role here. Is the economy in a full-employment situation or are there idle or excess resources because of deficient aggregate demand? This question deserves considerable attention. A full-employment economy is one in which no increase in output is possible in response to an increase in demand because no further resources are available.[5] In Figure 5-1, while demand rises from D_2 to D_3, output remains constant at *OC*. This situation represents a case of pure inflation, as the increased demand is reflected entirely in higher prices. The opposite situation is shown to the left of *B′B* in the chart, where the supply curve is infinitely elastic. Any increase in demand, such as from D_0 to D_1, results in a rise in output (and employment) *AB*, with no inflation. Both situations are extreme, and the real economy usually falls somewhere between *B′B* and *C′C*. Stronger demand results in some increase in output and employment, as well as in prices. The primary explanation for this is that, by itself, unemployment does not constitute evidence of underemployment (despite the terms used), defined as a situation in which the supply curve is perfectly elastic. All of the other resources required for production would also have to be available at no economic cost: not only unemployed workers looking for a job, but also machinery, buildings, energy, engineers, foremen, transportation equipment, and replacement parts. A situation of pure inflation is also probably rare, but an economy like Canada's can never be permanently in a situation of underutilization of all resources. Indeed, the total supply curve is surely inelastic over the medium term, much closer to *C′C* than to *B′B*.

Another view that is occasionally put forward argues that there exists an unwritten rule of common sense stipulating that a firm would seek EDC assistance only when production slowed down, generating excess capacity. In other words, a firm would only accept new orders to maintain normal production levels. We do not believe such a rule exists. Business is interested in profits, and if a project is profitable, a firm will take on the work regardless of whether it must expand and regardless of the current state of the economy.

Real Flows

The impact of an export loan can be studied in the context of National Accounts definitions. The following identity:

$$(5.1) \quad Y \equiv C + I + G + X - M,$$

states that GNP (Y) is the sum of consumer expenditure (C), investment expenditure (I), public expenditure on goods and services (G), and net exports, that is, gross exports (X) minus imports (M).

Full Employment

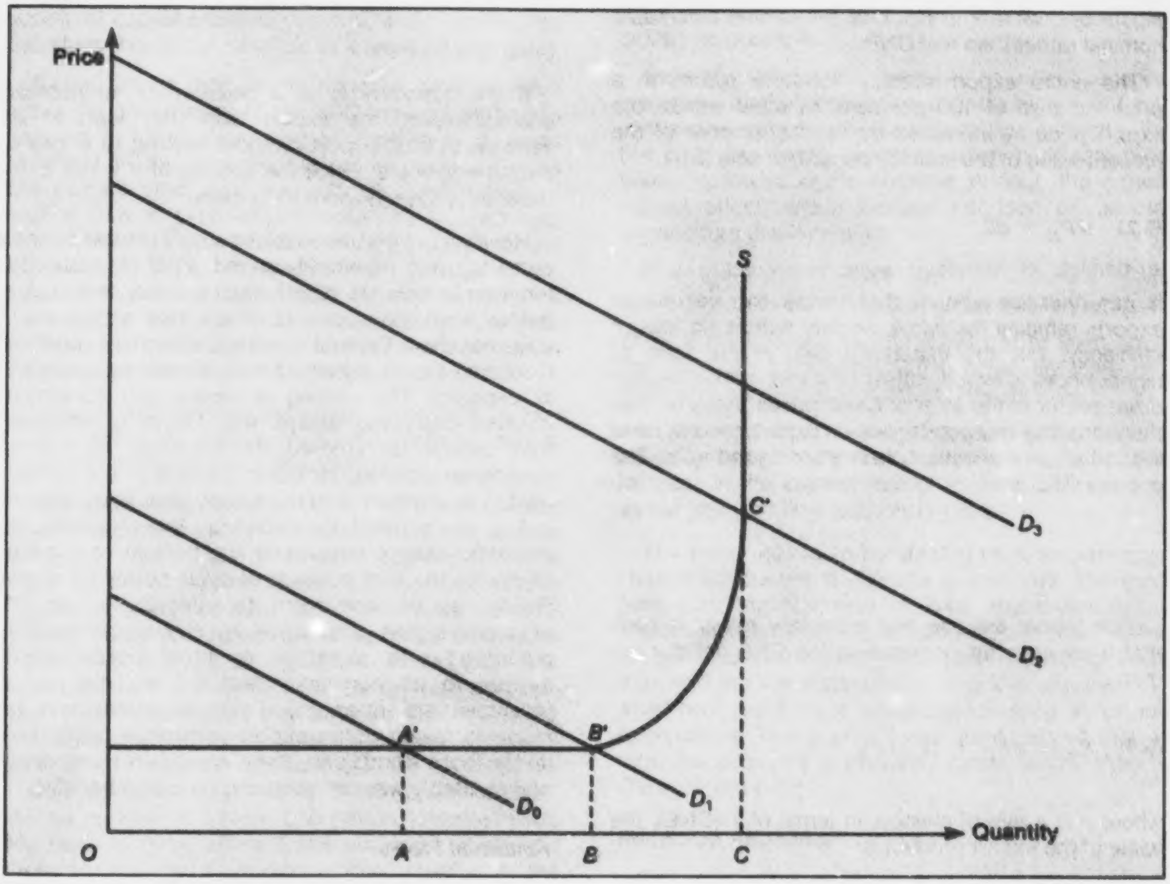
If the economy is operating at full capacity, then real Y is already at its maximum, and $\Delta Y = 0$.

If the export loan of $100 million is granted under these conditions, other exports not financed by the government may decrease, and leave X unchanged. We shall return to this specific case later, but it is already clear that an export loan does not guarantee an actual increase in total exports.

Assume, however, that X does increase. Since $\Delta Y = 0$, the increase in exports will lead to an automatic drop in consumption, investment, or government spending, or else to an increase in imports. What happens then? If domestic investments are reduced, when the return is generally 15 per cent, and if the loan produces a return of 8 per cent, the

Figure 5-1

Supply and Demand



nation is giving up a 15 per cent return to earn 8 per cent instead. The earnings on the $100 million loan are therefore $8 million instead of $15 million; the net loss is $7 million. The loss is the same when the adjustment occurs through consumption or government spending. Consumers can always choose between consuming or saving. If they consume, it is because the marginal utility they obtain is worth at least as much as the money they could make by investing. This reasoning also applies to government spending. If government requires the same marginal return on its expenditures as it could earn on the private investment it sacrifices, the net loss to the country on the export loan is still $7 million. Finally, if the increase in exports is offset by an equivalent increase in imports, the trade balance remains the same, but the country ends up with a foreign loan earning 8 per cent, while importers must finance their purchases of foreign currency at market rates, which are much closer to 15 per cent than to the EDC's 8 per cent. It should be noted, incidentally, that the true cost of imports is not the EDC's borrowing costs in international markets, but the borrowing costs of importers.[6]

Part of the subsidy incorporated in the government export loan is recovered in the form of profits for the exporter who obtains the order, while the rest is a gain accruing to the foreign borrower plus a dead loss of efficiency, depending on the specific supply and demand elasticities for each category of products.

Let us now turn to the case where the export loan does not increase the volume of total exports because the supply curve is vertical, or perfectly inelastic. This situation is similar to that described in Figure 5-1, while Y in equation 5.1 is now defined as nominal rather than real GNP.

The entire export subsidy therefore results in a price increase of 100 per cent. In other words, the export price P_X increases by the full amount of the present value of the subsidy per unit of sale (S).

$$(5.2) \quad dP_X = dS.$$

It can thus be shown that, since the volume of exports remains the same, society suffers no loss of efficiency, but the exporter's gain in the form of higher prices is exactly offset by a loss in the unsubsidized sector in the form of lower prices. Assume that there are only two goods, one an export good (X) and the other a domestic-consumption good (C). The price of GNE is:

$$(5.3) \quad P_Y = P_C^{a} P_X^{(1-a)}.$$

Let us further assume that monetary policy is such that it prevents any increase in the GNE deflator, so that:

$$(5.4) \quad \dot{P}_Y = a\dot{P}_C + (1-a)\dot{P}_X = 0,$$

where $\dot{P}$ is a rate of change. In terms of Y (GNE), the value of the export product is:

$$(5.5) \quad V_X = \frac{XP_X}{P_Y},$$

and the change in V_X, following the subsidy, is:

$$(5.6) \quad dV_X = \frac{XdP_x}{P_y} = \frac{XdS}{P_Y}.$$

Similarly, the value of the domestic-consumption good is:

$$(5.7) \quad V_C = \frac{CP_C}{P_Y},$$

and the change in the value, given equation 5.4, is:

$$(5.8) \quad dV_C = \frac{-X\,dS}{P_Y},$$

- i.e., a decrease in the price of the consumption good that is identical to the increase in the price of the export product.

Underemployment

If the economy is in a situation of widespread unemployment, the export loan may lead to an increase in total exports without leading to a loss of output elsewhere. Since the volume of Y is not at its maximum, there is room for growth.

However, many reservations and constraints then come to mind. As already stated, all of the resources required to increase output must be in excess supply before intervention occurs. If the rest of the world does not share Canada's underemployment situation, Canadian export industries may already be operating at capacity. The shifting of labour and equipment involves costs and delays, with losses of efficiency that cannot be ignored. Furthermore, all export-assistance policies, including Canada's, are permanent. The support continues year after year, regardless of the state of the economy. But of course, no economy always remains at the bottom of a cycle, otherwise the very concept of cycle could not apply. Finally, as an instrument for stabilization or job creation, export assistance is very discriminatory, compared with monetary or fiscal policy, which applies to all economic sectors.[7] In brief, when resources are unemployed, an argument can be made in favour of an export-assistance policy but, under those conditions, there are much more direct and equitable ways of obtaining the same benefits.

Financial Flows

Let us now examine export-financing assistance in terms of the financial flows involved, using the same assumptions as in the last section.

In a full-employment economy, all available capital is, by definition, invested. Granting an additional \$100 million loan therefore assumes that \$100 million has been withdrawn from other markets, which implies higher interest rates in those markets – a concept known as "crowding out." The country has traded a \$100 million investment earning a social rate of return of 15 per cent for a foreign claim earning 8 per cent. Risk is another consideration. Even if interest is charged at 15 per cent, the increase in the portfolio's risk factor that results from government intervention entails a loss, since it is assumed that the borrower could not have obtained the loan in the market at the going rate. Indeed, banks everywhere refuse to lend at fixed rates for the long maturities that are requested in the case of government loans. The only plausible explanation is that private lenders find the risk too great.

When capital resources are underutilized, the supply of capital exceeds demand, and interest rates therefore should not increase as a result of the loan.

Finally, let us look at the situation created when either the government or the EDC borrows abroad to finance a transaction. Since Canada is a small borrower in the international market, interest rates are not affected, and we get the same inflow of capital that a cash export would have produced. Under such circumstances the purely financial obstacles to filling an export order are eliminated. Considerations associated with the real side of the transaction, such as those seen in the previous section, will then determine whether the increase in total exports will occur and at what price.

Foreign-debt service, however, represents a real cost in resources, while service on a domestic debt is a transfer payment within the country.

This leaves the potential impact on the exchange rate. If exports actually increase, if the financing is domestic, and if imports remain the same, then the value of the Canadian dollar will rise, implying a transfer of resources from consumers to exporters. If exports actually increase and the external balance is maintained through an increase in imports, the exchange rate will remain the same, but we have seen that importers will pay a higher rate of interest than that charged on the loan. In subsequent years and for the duration of the loan, the country will therefore register an inflow of $8 million in interest, but an outflow of $14 to $15 million, depending on the rates in force abroad; this will exert downward pressure on the Canadian dollar. Finally, if the financing is obtained abroad and the EDC charges as much interest as it must pay on its own borrowing, the dollar will appreciate if the volume of exports increases. The outflow of interest and repayment related to the EDC's borrowing is then offset by the inflow of interest and capital on the EDC's loan to the foreign importer. The Canadian dollar increases in value if the interest earned exceeds the interest paid by the EDC; conversely, it loses value if the EDC lends at a lower rate than that at which it has borrowed.

Crowding Out

Macroeconomic theory thus gives us very clear results for extreme assumptions. Under full employment of resources, government intervention cannot stimulate the economy or employment. In turn, under conditions of widespread resource underutilization, the same intervention may have very positive effects on output, employment, and total exports – the focus of our concern here.

Empirical tests are necessary to guide us in choosing assumptions that represent the real economy as closely as possible.

Several simulation models provide concrete measures of the stimulation or inducement impacts associated with macroeconomic policy changes. For the past few years, these stimulation effects have been expressed in the negative through the crowding-out effect, which focuses attention on private-expenditure displacement.

If a public-expenditure multiplier is defined as $M = \frac{\Delta Y}{\Delta G}$, the crowding-out effect will equal $1-M$. Thus, if the increase in GNP does not at least equal that in public expenditure, then obviously there is a simultaneous decrease in private expenditure.

In principle, the crowding-out effect is the result of either an increase in prices, as in Figure 5-1, or of an increase in the interest rate or in the exchange rate, as our financial-flow analysis implies.

The major lesson to be learned from the empirical studies conducted in Canada is that, over the short term (say the first year or two), the crowding-out effect may be negligible, although it can reach 50 or 60 per cent in the third year. This means that more than half the initial stimulation shock is canceled out after two years by a simultaneous drop in private expenditure. This is why it was stated above that, in fact, the economy is probably closer to C'C than to *B'B* in Figure 5-1.[6]

Resource Allocation

The preceding analysis was conducted from a macroeconomic perspective, in order to determine whether – and under what circumstances – export assistance can stimulate total exports, output, and employment.

Such an approach, however, overlooks the possible impact of export assistance on resource allocation. Even if total output remained unchanged, a shift of resources towards more productive or socially desirable sectors could undoubtedly increase the general efficiency of the economy.

An attempt has been made to determine how realistic that assumption is, using the data in an EDC internal study, kindly made available to us by the president of the corporation. In the study, the products covered by EDC financing between 1971 and 1980 were classified as shown in Table 5-1. The

Table 5-1

EDC Loan Approvals, by Product Category, 1971-80

	1971-75	1976-80	1971-80	Share of total, 1971-80
		($ Millions)		(Per cent)
Industrial equipment	397	2,094	2,491	32.3
Aircraft and parts	177	297	474	6.1
Railway rolling stock	231	117	348	4.5
Shipbuilding	702	210	912	11.8
Communications equipment	188	298	486	6.3
Electrical equipment	440	293	733	9.5
Nuclear energy	380	1,307	1,687	21.9
Unclassified products	95	490	585	7.6
Total	2,610	5,104	7,715	100.0

SOURCE EDC, *Canadian Capital Goods Exports and EDC Financing: An Economic Assessment* (Ottawa: EDC, 1982), Section 3, Chapter 3, p. 19.

authors then calculated a social rate of return similar in principle to the concept used in Chapter 4.[9] This rate of return was applied to the capital-goods industries whose products are supported by the EDC as well as to the entire manufacturing sector (Table 5-2).

Table 5-2

Real Economic Return, by Product Category, 1975-79 Average

	Rate of return
	(Per cent)
Industrial equipment	12.2
Aircraft and parts	8.4
Railway rolling stock	7.8
Shipbuilding	5.2
Communications equipment	10.0
Electrical equipment	9.3
Total manufacturing	11.9

SOURCE EDC, *Canadian Capital Goods Exports and EDC Financing: An Economic Assessment* (Ottawa: EDC, 1982), Section 3, Chapter 3, p. 15.

The study's results enable us to develop the following argument: the EDC will contribute to a more efficient resource allocation if it supports products that generally earn an above-average return. Table 5-2 indicates that the only industry producing a higher-than-average return is the industrial-equipment sector. The EDC therefore tends to increase overall efficiency when it succeeds in increasing exports of this category of capital goods. In fact, the EDC devoted only one-third of its resources to that industry during the 1970s. On the other hand, since the corporation also supports industries whose social rate of return is below average, its overall influence on resource allocation is much less favourable. To clearly illustrate this point, the rates of return in Table 5-2 are weighted by the proportion of EDC resources devoted to each product category as given in Table 5-1. This results in an average rate of return applicable to EDC financing that can be compared with the return applicable to the Canadian manufacturing sector as a whole.

Since data on rates of return in the nuclear industry are not available, assumptions had to be made about the treatment given this major beneficiary of EDC operations (Table 5-3).

Table 5-3

Real Economic Return With or Without Nuclear Equipment, 1971-80[1]

	1976-80	1971-80
Nuclear equipment included in electrical products	10.4	9.7
Nuclear equipment excluded from calculations	10.8	9.8
Nuclear equipment with a return of 5 per cent	9.2	8.7

1 In all cases, unclassified products are obviously excluded from the calculations.

SOURCE Estimates by the authors.

Over the 1976-80 period, the average social return in the industries supported by the EDC amounted to 10.4 per cent when nuclear products are treated as electrical products. The return for the 1970s as a whole was 9.7 per cent. The EDC's average resource allocation is therefore much less favourable than that of the entire Canadian manufacturing sector, which earned a return of 11.9 per cent. Thus, the EDC did not contribute to a more efficient allocation of resources.[10]

That conclusion is reinforced when it is realized that the assumptions used are biased in favour of the EDC – namely, that the particular projects supported by the corporation are as profitable as the average projects in private industry. Remember, however, that actual EDC-supported projects are, by definition, less profitable than others since, without that support, they would not have been undertaken.

Using the weights given in Table 5-1, it is also possible to estimate the hourly productivity of labour in EDC-supported industries. The average works out to $23.86 an hour in 1980 when nuclear equipment is classified as electrical equipment. The productivity of labour in the entire Canadian manufacturing sector was $23.73 an hour in 1980. Consequently, the EDC does not support industries that are more productive than the average.

Gains in Efficiency

Increasing Exports

The EDC's purpose is to increase Canadian exports. As we have seen, this objective has no absolute value in itself. While exports are an indispensable means of achieving the trade gains associated with the international specialization of labour and with economies of scale, these gains can also be achieved simply by removing tariffs and other barriers. Export subsidies are not necessary to achieve greater exports. The public financing of exports in a protectionist environment is at best a compensatory measure (as we shall see later) and at worst a measure that adds more distortions to the efficiency losses already caused by tariffs.

Job Creation and the Trade Balance: Some Simulations

Balancing the current account and creating jobs are two concerns of macroeconomic policy. It can be recognized readily that while private firms may help to earn foreign currency and create jobs, they may miss out on some of the benefits to be derived from a better-balanced economy. In theory, these are relevant positive externalities, but determining whether – and to what extent – such externalities exist in the real world is quite another matter.

The analytical arguments were laid out in the preceding section, and the possibility that productive capacity can remain underutilized over the medium term was ruled out. In a recession, some resources can be mobilized immediately, but export subsidies are inappropriate because they are, by nature, independent of the cycle. In some circumstances, they may even be procyclical, thus increasing rather than lessening the extent of the fluctuations. In any event, a long-term export-financing program has nothing to do with economic stabilization. If by chance it occasionally produces favourable secondary effects for the economy, that does not make it an appropriate instrument of countercyclical policy.

Although this analysis provides sufficient grounds, in our opinion, for rejecting *a priori* the existence of externalities that are meant to offset and justify the cost of government intervention in this area, it is nevertheless instructive to look at the few attempts that have been made to model and measure the potential impacts of those programs.

First, consider the studies that attempt to determine the employment effects of several federal assistance programs – the work of the Economic Council of Canada on regional development policies, for example.[11] None of these studies, to our knowledge, has ever claimed that every job created by an assistance program is, in fact, a net additional job for the economy as a whole. Thus any job creation program always shifts some workers from a prior job. A simple example that comes to mind is that of a construction project that hires four unemployed workers but also requires the services of an engineer who is already working at other sites. The project therefore creates five jobs in total, four of which are new or additional jobs. Expressions have been coined to cover this situation. One is the "rate of incrementality" which, in our example, would be equal to four out of five, or 0.8; another is the "rate of displacement," which is the inverse of the preceding measure: one out of five, or 0.2.

In attempts to empirically determine the incrementality of regional development programs in the Atlantic provinces, the Council used a figure of 0.4. In other words, 40 per cent of the jobs created by a program are incremental, with respect to the situation before the programs were implemented.[12]

Given the region selected for these calculations and the nature of regional development programs, it should be obvious that the net job-creation rate associated with public export-financing programs is proportionally less than this and could even be negative.[13]

Second, the EDC itself attempted in 1982 to measure the macroeconomic impact of its financing activities, using simulations of the TIM and CANDIDE general-equilibrium models.

We need not delve into the details of the scenarios for each of the results obtained, but the procedures used can be characterized in such a way as to provide at least a basic understanding. In a first set of simulations, the increase in exports is assumed exogenously outright. As a consequence, this exercise is only useful to establish the possible impact of any export activity. This was accomplished by comparing it with the impact of an equivalent decline in personal income tax. The results revealed that increased exports are indeed more beneficial. But, in our opinion, these simulations do not address the prior question of whether total net exports do increase as a result of special financing.

A second set of CANDIDE simulations begins by estimating the reduction in prices that is necessary to obtain the target increase in exports. The estimate is taken directly from the demand elasticities produced by the model. It is then assumed that the subsidies necessary to lower the prices are devoted in one case to exports and in the other to an increase in public expenditures. This brings us back to the impact of the two programs, but this time the results do not necessarily favour the export-financing program. The income and employment multipliers are either the same or slightly favourable to public spending. The problem with this simulation is that it assumes, rather than proves, that the domestic-supply curve is perfectly price-elastic. That is precisely the critical variable whose shade and shape one is striving to find, as is clearly stated in the first section of this chapter. The argument is, in effect, that export financing is beneficial *a priori*, provided that all the resources required are initially in excess supply – in other words, provided that the supply curve is horizontal, as in Figure 5-1. This simulation therefore establishes again by assumption what we are attempting to learn.

Contrary to the final statement in the EDC study, therefore, we do not believe that "the case for supporting capital goods exports is most demonstrably positive."[14]

At this point, mention should be made of another simulation conducted with the CANDIDE econometric model, as reported by the Economic Council of Canada (1982, Appendix E).

In the first section, we considered various alternatives for economic adjustment following a possible increase in exports. Imports were one of the adjustment mechanisms. When output is constant, exports represent a reduction in the quantity of goods available for domestic consumption. It is only natural to think that this reduction can be offset by imports. The simulation that is considered now compares the relative impacts of simultaneous increases in both exports and imports. Another reason for looking at the problem in this way is that, *ceteris paribus*, an increase in exports changes the trade balance and that the surplus recorded by one country is automatically a deficit for another. In the long run, it is not possible to expect to increase exports without allowing trading partners to pay for them with their own exports. To this general argument is added a second one: when exports receive special financing, there is a greater likelihood that the recipient country will attempt to settle its debts on a bilateral basis rather than let its trading partner purchase its imports from the lowest-price supplier. In such a situation, Canada would lose on both counts – selling below the market price and buying above the market price.

Regardless of the outcome of this last scenario, the CANDIDE model clearly indicates the uselessness of artificially stimulating exports when these are offset by imports. In the long run, the two effects tend to cancel out. The net results of intervention are nil in terms of job creation and improvement in the trade balance.

Diversification of Markets

The diversification of markets is another objective that is characteristic of Canadian policies. Many see as undesirable the concentration of Canada's trade in the United States because it generates feelings of dependence and, from a purely economic point of view, involves cyclical risks. Consequently, a number of governments have sought to diversify both Canada's sources of supply and the markets for its products. Recall, for example, the quantitative targets set by the Diefenbaker government for trade with Britain in the early 1960s.

In order to spread risk, private investors and producers will also seek to develop a portfolio of investments, clients, or suppliers that is as diversified as possible. Private business therefore strives for diversification on its own. Such diversification does not necessarily belong to the area of externalities. On the other hand, government may well wish to proceed beyond what an individual producer might consider optimal. Considerations of security of supply, economic stabilization, or foreign policy may prompt government to press ahead. Giving such a responsibility to the EDC is therefore not devoid of reason or interest, but it is very difficult to measure the value of this type of benefit for the country as a whole.

Short of an overall assessment, it is nevertheless useful to ask whether the EDC does contribute to diversification of this type. Chapter 2 answers this question in the affirmative – particularly Table 2-4, for insurance, and Tables 2-5, 2-6, and 2-19, for financing. EDC insurance applies to a much larger proportion of exports to Central America, Africa, and the Middle East (23 to 31 per cent) than is the case for exports to the United States (0.5 per cent). Even though insurance needs vary by regional destination, the EDC is working in the right direction. It is still surprising, however, that 13 per cent of insured exports in 1980 were bound for the United States. Coverage ratios vary less in the case of EDC loans (Table 2-6), but they are higher for destinations other than the United States and western Europe. Thus the EDC contributes, at its own level, to the development of new markets, since almost two-thirds of its credits are granted outside the United States and Europe.

Another relevant consideration for the developing countries in particular is the complementarity that exists between export-assistance policies and foreign-aid policies. This is an additional source of externalities, when Canadian policies are viewed in a broader perspective than that of trade alone.

Industrial Structure

The government's strong interest in the structure of industry, in more extensive processing of products, and in innovation indicates a social preference that reaches beyond the individual producer. This would then be a clear externality. But that still does not begin to solve the problem of what value can be attributed to a different industrial structure than that produced by the market over the years. As the stridency of the debate over this issue in Canada shows, opinions vary widely, with some arguing that industrial strategies are nothing but hot air, while others are convinced that Canada's survival is at stake.

The distribution of EDC loans appears to favour processed products, while that of insurance is more in doubt, since 60 per cent of insured exports in 1980 involved forest, agricultural, and textile products (Appendix Table B-8).

It goes without saying that the present industrial structure is not necessarily the best. History is not built on rationality alone, not even that of the market, but it is also the result of accidents and interventions of all kinds. In principle, export assistance could serve to correct past errors, but extraordinary foresight and skill would be necessary to restrict such aid to the industries that were the victims of these errors and to maintain consistency between the compensation and the losses suffered.

The correction of distortions is discussed below.

Additional Services to Exporters

While the presence of externalities enables the public sector to produce net gains in efficiency, it is also of interest to consider those services provided by the EDC which are not available in the private sector. No doubt these services are valuable in their own right to those who use them, but then the question arises as to why they are not provided by the market. This is an important matter, since legislators use this argument both to defend the EDC and to reassure the private sector that government is not attempting to take over its field of action

It is a fact that the private insurance industry in Canada has shown little interest in entering the export field, thus leaving the EDC with no competitors until now. This situation is not easily explained, especially since even in other countries private insurers often operate both on their own account and for government agencies, which further confuses the situation. As already observed, it is easy to understand the reluctance of private insurers to cover sales that are quite unusual or extend over a very long period. But a study of the EDC's insurance activities reveals that 80 to 90 per cent of its transactions involves terms of less than two years, with what appears to be a satisfactory range of risks. Moreover, the insurance program is very profitable for the EDC,[15] despite the considerable freedom given exporters in the choice of risks (unlike what occurs in several countries where insurance is compulsory). Does this market failure reflect a lack of competition, the presence of onerous regulations, or a lack of imagination or information? It is impossible to say. We can only suggest that the very presence of the EDC may pose an insurmountable obstacle to the industry so long as the corporation does not develop forthcoming mechanisms of cooperation, as it did successfully with the banks in the field of lending. For the future, it is worth noting that the industry is now showing interest in the insurance market and that the EDC, in our opinion, should not raise obstacles to cooperation with these new potential partners.

In the field of export financing, the situation is both more complex and clearer. The private sector has left two well-defined segments of the market to the EDC: loans with maturities of five years and more (with few exceptions), and loans at fixed interest rates, as opposed to the floating interest rates common among private lenders. The banks' refusal to provide fixed-rate credit today is easily explained: this service is only provided by the public sector because it is subsidized. The benefits for an exporter or importer are thus very real, but the cost of the subsidy must be subtracted in order to obtain the relevant net social gain. Leaving aside the most recent years, however, one must ask again precisely why the chartered banks have neglected this market. Nothing prevented them *a priori* from borrowing at maturities identical to those of their loans, so that a fixed interest rate incorporating a reasonable profit margin should have presented few difficulties. European merchant banks have had considerable experience in this market, and similar transactions should also be possible in Canada. Finally, recent initiatives by the Canadian banks appear to signal increased participation in export financing.

Although loans in the international market are a routine operation for private Canadian institutions, the latter argue that their borrowing costs are automatically higher than those of the EDC because they are not backed by a government guarantee, and their ability to compete with the EDC is thus hindered. Since it must pay dividends and taxes, a private institution must also maintain a better profit margin. The cost of borrowing is, in fact, generally higher for business than for the federal government. The difference is probably between 0.5 and 1 percentage point on medium- and long-term securities for well-established firms. The government benefits from a risk discount, as it were, because it can always use its power to tax citizens to reassure its creditors, rather than rely solely on the internal viability of the projects that it finances.

Although public agencies and governments do enjoy a very real advantage over private lenders with respect to borrowing costs, the benefit is fictitious in terms of the country as a whole. It is obtained, in fact, against additional guarantees that are given to the lenders. In this sense, a government is not treated in any different or privileged manner, relative to any other borrower. Any individual can obtain a loan at a better rate if he/she agrees to provide better collateral, such as a mortgage on his/her house, insurance policies, or the signature of a warrantor.

While the analogy should not be stretched too far, the government's advantage in borrowing costs can be viewed as a reverse subsidy from the taxpayers, since they are in fact underwriting the government's loans.

Another argument that is occasionally used to explain the private sector's reluctance to enter the field of export insurance and credit is that a Crown corporation such as the EDC has more bargaining power with foreign borrowers than a private firm. That advantage is said to derive from all the other intervention instruments to which the public body is assumed to have special access. Thus it could more easily overcome trade barriers and obtain changes to a tax regulation, a customs tariff, or even an act of Parliament; the borrower may hope that the Crown corporation can arrange things and secure other concessions, such as grants or Canadian orders to stimulate bilateral trade. It is also argued that the risk of default by the clients of a Crown corporation is lower than for a private firm, for similar reasons. Those who borrow or obtain insurance from a government agency may fear more negative repercussions, because of the interdependence that they perceive between their transactions with the EDC and the other business relations that they have with Canada, than if the insurer or lender is a private financial institution.

These considerations seem to indicate that what is a profitable activity for a Crown corporation is not automatically profitable for a private firm, because of different behaviour on the part of the clients.

Once again, that is a potential social benefit deriving from government presence, but its actual existence has never been proven.

Correcting Distortions in Foreign Trade

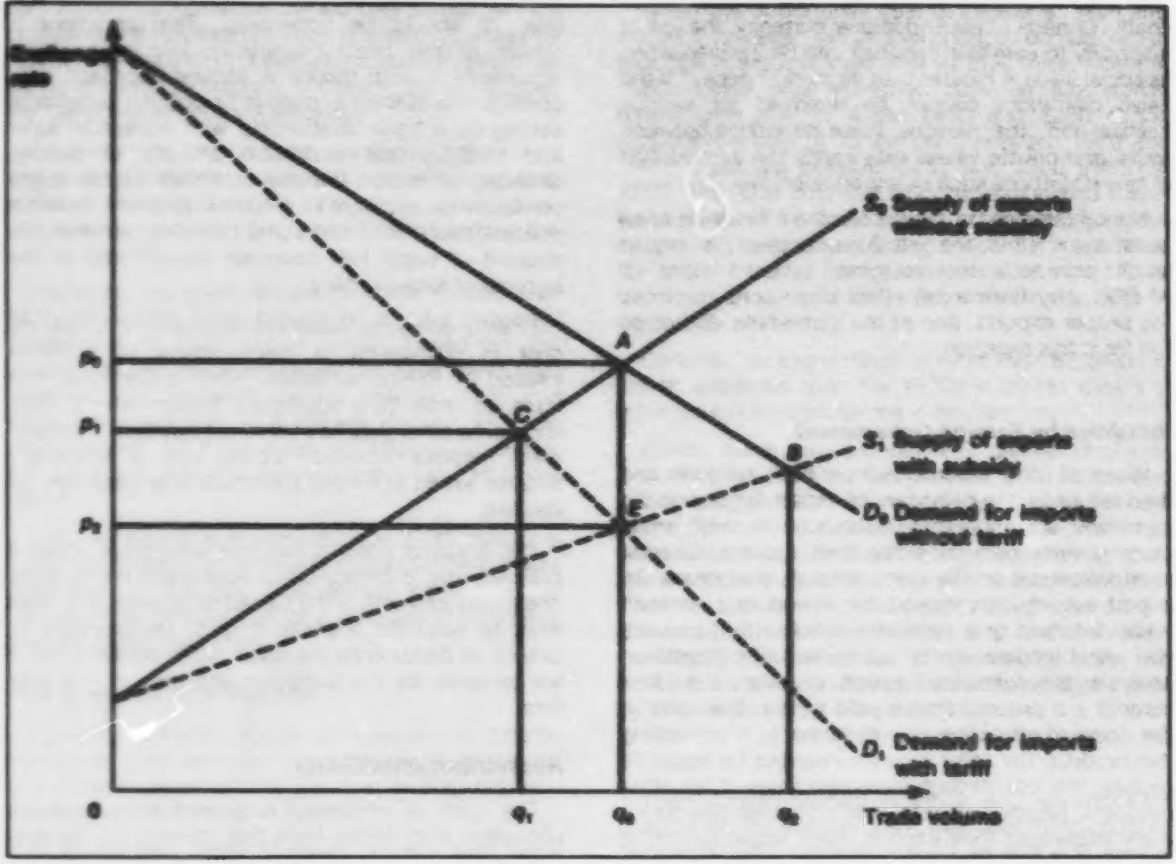
One of the most popular arguments for government intervention is that, in an imperfect world, the net result of a new distortion is unknown, since there is an equal chance of improving or worsening the initial situation. This is particularly true of trade policies.

That issue was discussed in the introduction to our study. Export assistance is liable to offset the tax on exports that is implicit in the overvaluation of the exchange rate that is caused by customs tariffs. This may not be the best place to develop theoretical demonstrations, but the illustration below shows that the situation is relatively complex (Figure 5-2).

Consider the case of a small economy that sells its exports and buys its imports at prices quoted in a foreign currency (say, U.S. dollars); furthermore, to simplify matters, assume there is no net movement of capital. Initially, the exchange rate (the price in domestic currency of a unit of foreign currency) is determined by the intersection of the import-demand and export-supply curves (point A in Figure 5-2). The initial exchange rate is p_0 and the volume of exports and imports is equal to q_0. If a tariff (say, a standard one) is levied on imported goods, the demand curve becomes D_1, and the equilibrium point shifts to C. The price of the foreign currency has fallen from p_0 to p_1 – that is, the national currency has appreciated – and the volume of trade has dropped from q_0 to q_1. This change in relative prices (of imported and locally produced goods) and the change in the resulting consumption pattern generally imply a reduction in the welfare of consumers. However, if we assume that a subsidy will shift the export curve from S_0 to S_1, then the new equilibrium is at E. Note that the level of subsidization is chosen here so that the volume of trade returns to its initial point q_0. The export subsidy thus neutralizes the tariff. In fact, if the composition of exports and imports remained the same at equilib-

Figure 5-2

Impact of Tariffs and Subsidies on Supply and Demand of Traded Goods



rium points *A* and *E* (a situation that would obtain if there were only one import good and one export good, for example), both situations would be equivalent in terms of consumer welfare. The only difference would reside in the fact that the exchange rate would be lower in the new situation; if consumption and production patterns did not change, this phenomenon would have no effect on the level of welfare. This demonstration indicates that an export subsidy can contribute to welfare, when the original situation involved a distortion that tended to reduce trade.

It must be stressed, however, that a possibility does not amount to a certainty. A specific subsidy such as that applied to export financing carries no guarantee that the results will be those desired. For example, the subsidy provided may easily exceed the optimum level and push trade volume to the right of point q_0. Furthermore, exporting industries may already enjoy various subsidies – such as the infrastructure provided by government, controls on energy prices, and tax benefits – so that the total subsidy that they receive may already exceed the compensation required. Finally, since assistance is granted very selectively, the composition of export trade will change from that of the initial equilibrium situation. This change alone may generate major costs if the wrong industries are promoted -- those in which the national economy does not hold a comparative advantage, for example. There is great difficulty in deciding whether a particular subsidy produces a gain in welfare and whether the level of subsidy is optimal. It would seem so much more simple to attack the source of the problem and eliminate import tariffs in the first place, if indeed governments are so determined to promote exports.

Along the same lines, it should be pointed out that import- and export-related taxes and subsidies may have created a gap between the private and social values of foreign currency, with the latter exceeding the former. As a consequence, since EDC activities enable Canada to earn additional currency, the use of a subsidy to earn this currency can be justified when its social value is greater than its market price.[16] If the basic distortions cannot be removed for various political and other reasons, these disparities between social and private values may justify the introduction of new distortions such as export subsidies.

Nonetheless, in our overall opinion it is still an open question whether the subsidies applied to export credit provide a real marginal benefit – that is, whether they have a net effect on exports, promote the proper exports, and at the same time do not go too far in this direction.

Subsidies by Foreign Government

When all other arguments have been set forth and then set aside, the defenders of export assistance dig in behind an apparently unbreachable wall: since other governments subsidize their exports, Canada must follow suit or risk losing all of its customers. An export subsidy can, indeed, be viewed as a nontariff trade distortion or a restrictive practice that reduces real world income. In the vocabulary of competition analysis, the subsidized export product is a "loss leader" – a product that is sold at less than cost in the hope of attracting new customers. In promoting this product, the seller incurs a loss, but he hopes to recover this loss through increased sales of his other products. Needless to say, if all countries simultaneously subsidized their exports, each would remain in the same relative position and gain nothing, while taking on the additional burden of its subsidy. On the other hand, the reduction in selling prices increases total exports, as determined by demand elasticities, and partially offsets the cost of the subsidy. Another potential source of compensation that should not be overlooked is the fact that a country can be both a lender and a borrower. Canada may be induced to provide a subsidy on some exports to third countries, because France subsidizes its exports there, but when Canada imports from France, it also benefits from the French subsidy. As we saw previously, insurance and export credit often apply to trade between industrialized countries as well.

That being said, a country with its best interests at heart must squarely reject the argument that it should subsidize its exports just because other countries subsidize theirs. That argument is ill-founded and misleading. If scarce resources must be used in export subsidies, it must be because there is a reasonable chance to recover the initial costs. While other potential benefits can be expected from this particular allocation of resources, the potential for turning subsidized exports into a profitable business later on should be uppermost. This argument is similar to the infant-industry or learning-by-doing arguments of tariff theory. A second approach is to consider the indirect economic or political benefits of setting up a trade relationship with access to safer and possibly less expensive sources of supply. Granting an export subsidy to Saudi Arabia might constitute an excellent long-term investment. Political considerations may also come into play, as when the support of some key countries proves vital to the success of foreign policy.

Finally, domestic subsidies reduce or prevent the cost of dislocation or displacement of activities caused by foreign subsidies. When a Canadian firm loses an order to a subsidized foreign firm, it must find some other way to maintain its output; displacement involves transition costs, and a temporary subsidy aimed at turning the situation around may be justified.

The essential point is that one should not adopt a policy simply to imitate one's neighbours but to serve one's own interests. If the Canadian government does want to subsidize exports, it must be prepared to defend its decision on the basis of the benefits that it will generate for the Canadian economy in whatever form.

Redistributional Gains

The rules of efficiency may lead to a resource allocation that differs from that desired by society. Governments now intervene almost routinely to protect or favour certain categories of citizens. In export financing, redistributional concerns have focused on small businesses and on regional development.

It will be recalled from Chapter 1 that Parliament has shown great determination, particularly in recent years, to promote exports by small businesses. Both the Hatch report and the report of the Special Committee on a National Trading Corporation supported this goal.[17] There are practically no statistics on this point yet, and certainly no assessment of the benefits to Canada of promoting the exports of small businesses rather than those of large corporations. In our judgment, reliance on small business in this area would be inappropriate, as that sector is characterized by a weak infrastructure, lack of stability, insufficient cash flow, virtually no expertise, and so on. Furthermore, the failure of one project could harm the chances of other Canadian firms for obtaining subsequent orders.

Behind this facade of encouragement to small business, the government's real intent may actually be to promote Canadian-owned over foreign-owned companies. If this interpretation is correct, it would be indirect evidence of renewed protectionism, which, as we have stated throughout this study, simply reduces the Canadian economy's efficiency.

As the words "regional development" make clear, the goal of regional policies is to shift economic activities towards some regions where, by assumption, certain resources are unused, particularly in the labour market.

We were not given access to some studies that have apparently been conducted on the provincial breakdown of EDC export credit, based on the location of the major exporter. We have been told, however, that for credit granted between 1970 and 1975, the breakdown is as follows: Ontario, 26.8 per cent; Quebec, 57.7 per cent; the Atlantic provinces, 5.6 per cent; and the western provinces, 10.0 per cent.[18]

If these figures are accurate, the EDC makes a major contribution to achieving regional-development objectives in Canada. The actual benefit to all Canadians is, however, more a question of judgment than a precise evaluation.

The Costs of Intervention

As stressed earlier, simple achievement of specific objectives is not enough; they must also be achieved at the lowest possible cost. The cost of EDC intervention has been estimated in this study.

First, the *real* rates of return for the EDC were found to be generally negative during the 1970s. It was also established that the EDC had a nominal return roughly equal to the government's cost of borrowing and that, in *financial* terms, the implicit subsidy was therefore small, at least until about 1977. In 1980, however, it ranged from $20 to $40 million, depending on the EDC activities involved.

When the opportunity cost of capital is taken into account, however, the picture changes completely. In fact, the average annual cost of EDC intervention in 1980 dollars was estimated between $92 million (opportunity cost of 4 per cent) and $200 million (opportunity cost of 10 per cent) between 1970 and 1980; it peaked between $280 and $386 million in 1980. The total cost of EDC intervention was therefore between $1.0 and $2.2 billion (depending on the opportunity cost used) during those 11 years. Thus the social benefits from these subsidies would have had to at least equal these amounts for the EDC to be socially efficient.

Certainly, an expenditure of more than $2 billion in export subsidies over the 1970s is by no means a minor program of government intervention.

Finally, some may wonder why greater emphasis was not placed on the fact that the EDC succeeded in obtaining a rate of return roughly equal to the cost of the public debt, thus eliminating the need for large overt subsidies. We even recognized that international comparisons of the degree of subsidization that countries provide for their exports are based on the difference between the financial cost and the return on capital, rather than on its opportunity cost. The estimates reported in Chapter 2 on the subsidies paid by France and Britain are cash subsidies – a form of assistance that, using this basis of comparison, the EDC has used rarely.

This accepted custom, however, is no substitute for analysis on the basis of the social opportunity cost of resources. This rule simply assumes that it is always more profitable to invest resources where the return will be greatest. In our opinion, it is not unreasonable to apply this standard to the EDC's activities.

6 Conclusion

This study is now complete, aside from a few final observations.

In very general terms, our judgment is that the EDC performs the tasks that it is assigned by government very well, but we question whether these tasks and the methods used for carrying them out are appropriate.

With respect to the corporation's objectives, one takes it for granted that exporting is a *sine qua non* in a modern economy based on specialization, interdependence, and uninterrupted change brought about by technological advance and innovation. Exports that beat out the competition from all other countries exert a very favourable influence on domestic resource allocation and thus boost productivity, real income, and welfare.

What is true of exporting *per se* is unfortunately not true of subsidized exporting. This basic distinction is usually ignored or quickly brushed aside. It should be clear, however, that while an export order may create ten more jobs than another activity, such as construction, the jobs that disappear as funds are withdrawn from elsewhere in the system to pay for the subsidy must be subtracted from the number of new jobs. In other words, landing a giant foreign contract is no reason in itself to pat ourselves on the back. We must also establish how much it costs us as a nation. Unfortunately, this critical information is not made public when the champagne flows to launch the project. In general, as pointed out in the introduction to Chapter 5, the decision to grant a subsidy should be based on expected specific benefits, such as external economies, redistributional gains, or foreign-policy objectives.

Such special benefits, however, are difficult to document. The arguments have been reviewed, and many have been found to call for intervention policies other than export financing; in other cases, the expected benefits simply do not exist.

In a study done in 1976, the Treasury Board concluded: "The indirect benefits of EDC activities are minimal or non-existent." The authors were referring to job creation, Canadianization of industry, reduction of regional disparities, and balancing of the trade accounts – all peripheral objectives that have also been examined in this study but not always estimated empirically.

Several other considerations, however, do seem relevant. One involves compensation for the losses to the exporter that are associated with the distortions that may exist in international trade; another is the lower risk factor for a Crown corporation, compared with a private firm. Furthermore, it is recognized that the industrial structure can be strengthened in cases where other policies had made it artificial. Finally, we accept that start-up or dislocation costs can be covered by strictly temporary support programs.

Admitting the validity of these arguments does not imply, however, that they should be translated specifically into the current export-assistance programs.

Indeed, we have argued that, even when government intervention is motivated by the best of intentions, it is not automatically effective or efficient. It must be determined that the benefits are in fact well worth the additional financial or economic burden on the country.

The net social opportunity cost of EDC intervention has been estimated at about 8 per cent of the committed capital, implying a net loss of between $1 and $2 billion over the 11-year period covered. The benefits actually earned should therefore equal or exceed this amount if the EDC is to be viewed as socially useful.

Externalities generated by government intervention are not measured in this study, and it is highly doubtful whether they could ever be without judgmental or qualitative evaluations.

Under current circumstances, our overall assessment is rather close to that of the U.S. Congressional Budget Office (1981) on the Eximbank:

> The report is unable to document any gains for the United States as a whole from the Eximbank program

as it currently operates. The report notes, however, that Eximbank's lending policies could be redirected to combat foreign lending practices that are viewed as unfair or to foster U.S. foreign policy goals.

In this context, the EDC's stated objective of promoting Canadian exports is too general. It is also ambiguous, since exports that are competitive need no promotion, while clarification is required about the specific conditions and reasons for the assistance to be provided by government for those exports that are not competitive. What we have in mind has already been done in at least two cases. The Export Development Corporation Act itself stipulates that the granting of insurance on foreign investments must generate specific benefits for Canada, to be defined by regulation or practice. The Foreign Investment Review Act and its regulations also mention a set of criteria defining the benefits expected from foreign investment in Canada. These precedents could be used to clarify and define more precisely the scope of the government's commitments to the EDC and to exports in general.

Turning to the EDC's means of operation, it is noted that the corporation is an independent insurance and loan corporation operating in the same field as any other private firm, except that it has special access to government funds and guarantees and pays no dividends or taxes. Despite Parliament's very clear intentions (discussed in Chapter 1), the Export Development Corporation Act contains no provision that prevents the EDC from eventually displacing private institutions in the field of export insurance or financing. The corporation has no particular obligations to the private sector. In the insurance field, the EDC actually operates as if it were the only institution of its kind in the world, as if no private insurance firm should ever enter this market. In the area of export financing, the corporation solicits bank participation but clearly prefers loans that it has negotiated directly without consultation. It is only too pleased if, after the fact, a bank accepts the conditions of the loan and provides part of the capital required. That is hardly surprising, since the EDC receives the full credit for the loan but only puts up a part of the capital. Nor should it come as a surprise if the banks, in turn, wish to maintain contact with their clients and retain their power to make decisions on the loans that they finance.

This approach can only lead to increasingly costly duplication of services in the field of export financing. The time is approaching – it may even have come – when the EDC will want to expand its information network throughout the world by opening overseas offices. Yet, Canadian banks already have such agencies, branches, or correspondents in most locations.[1] They have acquired a wealth of experience based on decades of continued contacts with foreign clients and associates. Why should the EDC, which already uses the services of the banks, find it necessary to short-circuit the existing networks, negotiate directly with overseas borrowers, and set up an entirely new infrastructure?

For a better perspective on these issues, one need only look at the status of most foreign agencies performing the same functions as the EDC. Surprisingly, no other country excludes private-sector participation from government export financing as much as Canada does. Although this statement may appear to be too sweeping, readers are invited to examine the summary (in Appendix E) of the major institutional structures set up for government intervention in other countries and draw their own conclusions.

The presence of banks in official export-financing activities takes many forms, depending on the country. One form is the rediscounting facility: the banks lend money and rediscount all or part of the loans with a special government agency or with the central bank. This is the practice in France, the Netherlands, Australia, and the United States. In Italy, the Mediocredito Centrale lends to banks rather than to exporters, which leads to roughly the same result. In Britain, the banks have always been the sole source of financing for borrowers; and, after many years of rediscounting bank loans, the Export Credits Guarantee Department (ECGD) withdrew this program in 1980. However, it continues to pay to the banks the difference between the interest charged under the OECD arrangement and the higher rate agreed under prior arrangements with the ECGD.

Elsewhere – in Sweden and Spain, for example – the counterpart to the EDC is a mixed corporation owned by both the government and the banks. In Sweden, the banks hold 50 per cent of the capital; in Spain, 49 per cent.

In West Germany, Norway, and Japan, the export-finance agencies are private consortia of banks participating in pools or subsidiaries. AKA in Germany is a consortium of 58 banks.

If the government wishes to maintain the supplementary and complementary role that it has assigned to the EDC, there is no shortage of models in other countries that could serve as useful guides.

A EDC Balance Sheets and Income and Expenditure Accounts

A Note on the Nature and Sources of Financial Information

Considerable effort was necessary to standardize the EDC's financial statements for the 1969-80 period. In fact, the EDC's accounting practices were changed during this period – specifically, in 1975 and 1979. Noting these breaks in the series of statistics required, we asked the EDC to provide corrected financial statements. As the president of the EDC admitted that his services were unable to reconstitute these financial statements, we decided to do it ourselves on the basis of information contained in a prospectus dated 12 March 1980.

The changes to the accounting rules appearing in the published statements involved primarily the following:

- separation of EDC and Canada Accounts after 1975;
- provision for losses beginning in 1979, thus affecting net earnings, accumulated earnings, and equity; and
- accrued interest beginning in 1975.

Furthermore, the annual reports often make adjustments to the data of the preceding year. In all cases, we used the data in the most recent reports.

Finally, the classifications changed quite often, which made it impossible in some cases to identify certain essential information, such as interest paid to the Government of Canada.

The tables in this appendix include each of the statistical series of the EDC's balance sheet and its income-and-expenditure account, as corrected for the changes made to the original sources.

This document was submitted to the EDC for verification. Our data were found to be accurate, except for the figures on the interest paid by the EDC to the Government of Canada. Since our own series could not be taken from the financial statements, it had been estimated from the data appearing in the Public Accounts. Unfortunately, we were forced to revise these figures so that they would coincide with the EDC's fiscal year, which is not the same as the government's fiscal year.

The EDC therefore sent us a new series on interest paid to the Government of Canada. Since the differences were not very large (except for 1977) and since our own study was already completed when the information arrived, no change was made. Table A-8 compares the two statistical series.

Finally, as usual, the 1981 *Annual Report* may correct the 1980 data as they are known currently. At the time of writing (in May 1982), the report for 1981 was not yet available. For purposes of publication, the calculation and conciliation tables were removed from this appendix. They are available on request from the Economic Council of Canada.

Table A-1

EDC Balance Sheet, Fiscal Year Ending 31 December, 1974-80

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Assets							
Loans receivable (less participation by other lenders plus accrued interest and fees)	796,244	1,041,815	1,369,405	1,751,235	2,125,725	2,655,387	3,251,628
Investment (cash and short-term investment plus Canada bonds at amortized cost plus accrued interest)	68,887	96,204	63,304	102,330	228,022	507,257	504,883
Other assets	2,098	3,348	3,746	5,212	5,436	13,856	22,247
Total assets (including accumulated provisions)	**867,229**	**1,141,367**	**1,436,455**	**1,858,777**	**2,359,183**	**3,176,500**	**3,778,758**
Liabilities							
Loans payable (including accrued interest)	759,359	986,361	1,239,738	1,609,770	1,866,399	2,628,231	3,188,286
Including loans from Canada	710,341	950,183	1,044,457	1,094,836	944,571	790,171	640,253
Accrued interest payable to Canada	14,193	21,269	n/a	n/a	n/a	21,233	17,812
Other liabilities	13,792	15,806	17,848	25,218	41,996	49,520	59,811
Including accrued interest payable[1]	6,615	7,058	7,487	7,883	8,227	8,514	8,773

Table A-1 (concl'd.)

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Accumulated provision for losses on loans (adjusted)[2]	7,962	10,418	13,694	17,512	21,240	27,055	33,000
Accumulated provision for insurance claims	3,376	5,860	5,771	5,026	6,567	11,528	8,823
Total liabilities	784,489	1,018,245	1,277,051	1,657,526	2,026,202	2,716,334	3,287,920
Share capital	50,000	80,000	100,000	125,000	225,000	310,000	310,000
Retained earnings	32,740	43,122	59,404	76,251	107,981	150,166	180,836
Equity (adjusted)	82,740	123,122	159,404	201,251	332,981	460,166	490,836
Total liabilities	867,229	1,141,367	1,436,455	1,858,777	2,359,183	3,176,500	3,778,756

[1] For the years 1974 to 1976, the accrued interest payable was included in the accumulated provision for losses on loans. Since 1977, it is presented on the balance sheet under "Other liabilities."

[2] For the years 1974 to 1978, the accumulated provision for losses on loans was estimated from the revised amounts of the annual provision given in the EDC prospectus, Ottawa, 12 March 1980, p. 21: $PRLA_{t-1} = PRLA_t - PRL_t$ where $PEL_t = 0, \forall_t$

SOURCE EDC, *Annual Report*, various years.

Table A-2

EDC Statement of Income and Expenditure, Fiscal Year Ending 31 December, 1974-80

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Loans and guarantees							
Interest and fees earned	48,807	68,944	94,514	125,088	165,668	206,531	258,815
Less interest expense	38,159	54,107	72,260	102,284	126,468	168,334	242,529
Less provision for losses on loans[1]	2,052	2,456	3,276	3,818	3,728	5,815	5,945
Net earnings on loans	8,596	12,381	18,978	18,986	35,472	32,382	10,341
Insurance							
Premiums and fees earned	3,055	3,198	4,452	5,652	9,643	10,399	11,486
Less provision for claims	65	1,615	1,528	1,109	2,192	8,095	4,121
Net earnings on insurance	2,990	1,583	2,924	4,543	7,451	2,304	7,365
Investments							
Interest earned	6,343	7,240	5,803	8,224	7,902	53,083	77,627
Less interest expense	4,620	5,952	5,395	7,803	9,351	30,943	48,667
Net earnings on investments	1,723	1,288	408	421	(1,449)	22,140	28,960
Administrative expenses	3,776	4,870	6,028	7,103	9,744	14,641	15,996
Total income	58,205	79,382	104,769	138,964	183,213	270,013	347,928
Total expenditure	48,672	69,000	88,487	122,117	151,483	227,828	317,258
Net income (adjusted)	9,533	10,382	16 282	16,847	31,730	42,185	30,670

[1] For the years 1974 to 1978, the revised amounts of the annual provision for losses on loans are taken from the EDC prospectus, Ottawa, 12 March 1980, p. 21.

SOURCE EDC, *Annual Report*, various years.

Table A-3

Adjusted Interest Paid to Canada, 1974-80

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Interest paid to Canada by the EDC[1]	39,879	55,064	72,866	88,217	96,621	93,420	99,182
Less interest and fees on export loans attributable to Canada Account	2,561	4,244	7,123	11,570	20,045	30,681	49,525
Adjusted balance[2]	37,318	50,820	65,743	76,647	76,576	62,739	49,657

[1] Estimations based on data from the Public Accounts, "Statement of Earnings of the Department of Industry, Trade and Commerce," Volume 2, Section 10. The following revision is made to adjust for the difference between the government's fiscal year ending 31 March and the EDC's fiscal year ending 31 December:

$$I_t = \tfrac{3}{4}\bar{I}_{t+1} + \tfrac{1}{4}\bar{I}_t$$

where I_t is the amount of interest in the Public Accounts for year t.

[2] For the years 1979 and 1980, interest paid to Canada amounted to $85.938 and $54.800 million, respectively. For consistency, the Public Accounts series has been retained.

SOURCE: EDC, *Annual Report*, various years, and statement of changes in the Canada Account.

Table A-4

Settlements and Recoveries of Claims by the EDC, 1974-80

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Claims paid	1,906	1,591	2,296	3,047	6,490	3,798	10,382
Less claims recovered	2,716	2,460	680	1,193	5,839	664	1,555
Balance	(810)	(869)	1,616	1,854	651	3,134	8,827

SOURCE: EDC, *Annual Report*, various years.

Table A-5

EDC Balance Sheet, Fiscal Year Ending 31 December,[1] 1969-74

	1969	1970	1971	1972	1973	1974
			($ Thousands)			
Assets						
Loans receivable (capital plus accrued interest and fees)[2]	254,903	294,800	383,449	499,366	591,045	800,831
Investments (cash and short-term investments plus Canada bonds at amortized cost plus accrued interest)	37,733	51,560	58,025	70,551	88,400	68,887
Other assets	647	1,760	580	236	336	2,098
Total assets (including accumulated provision)	**293,283**	**348,120**	**442,054**	**570,153**	**679,781**	**871,816**
Liabilities						
Loans payable (including accrued interest)	256,910	294,886	377,832	497,241	587,272	764,175
Short-term debt	-	-	-	44,878	15,404	34,973
Loans from Canada[3]	256,910	294,886	377,832	452,363	571,868	724,386
Loans from other lenders	-	-	-	-	-	4,816
Other liabilities	5,286	7,810	4,937	5,547	6,639	10,223
Accounts payable	113	176	116	180	394	227
Premiums paid as deposit by insured	122	163	208	208	225	249
Premiums carried forward	1,757	3,628	3,533	3,503	3,648	3,246
Amount payable to Canada	3,267	3,366	60	23	8	1,738
Errors and omissions[4]	27	477	1,020	1,633	2,364	4,763
Accumulated provision for losses on loans[5]	309	1,620	3,011	4,363	5,618	6,615
Accumulated provision for insurance claims[6]	6,000	6,000	6,000	6,000	6,000	6,000
Subtotal	268,505	310,316	391,780	513,151	605,529	787,013
Share capital	10,000	15,000	20,000	20,000	25,000	25,000
Surplus contribution	10,000	15,000	20,000	20,000	25,000	25,000
Retained earnings (adjusted)[7]	4,778	7,804	10,274	17,002	24,252	34,803
Equity (adjusted)	24,778	37,804	50,274	57,002	74,252	84,803
Total liabilities	**293,283**	**348,120**	**442,054**	**570,153**	**679,781**	**871,816**

[1] Aside from changes or agreements indicated above, these financial statements exclude those items in the government account that we are able to identify and thus apply strictly to EDC operations.

[2] For the years 1969 to 1971, includes loans receivable (maturing in one year) for the government account.

[3] For the years 1969 to 1971, includes loans and advances from Canada (maturing in one year) for the government account.

[4] Equals the sum of cumulative net earnings (from 1 October 1969) for the government account and the difference between the assets and liabilities of the government account given in the two joint financial statements.

[5] Corresponds to the provision for losses on items receivable.

[6] Corresponds to the provision for claims on credit-insurance contracts.

[7] Cumulative net earnings (from 1 October 1969) in the government account have been deducted.

Source: EDC, *Annual Report*, various years.

Table A-6

Statement of EDC Income and Expenditure, 1969-74

	1969[1]	1970	1971	1972	1973	1974
			($ Thousands)			
Loans and guarantees						
Interest and fees earned	3,743	15,970	20,980	29,554	37,382	49,065
Less interest expense	3,250	14,264	17,929	24,014	30,584	41,781
Less provision for losses on loans[2]	309	1,311	1,391	1,352	1,255	997
Net earnings on loans	184	395	1,660	4,188	5,543	6,287
Insurance						
Premiums and fees earned	271	1,379	1,726	1,668	1,875	3,310
Less provision for claims[3]	120	(297)	1,988	(288)	1,927	(809)
Net earnings on insurance	151	1,676	(262)	1,956	(52)	4,119
Investments						
Interest earned	633	3,164	3,542	4,087	5,901	6,343
Less interest expense	n/a	n/a	n/a	n/a	n/a	n/a
Net earnings on investment	633	3,164	3,542	4,087	5,901	6,343
Administrative expenses	420	2,017	2,410	3,480	4,134	4,460
Foreign-exchange losses	-	42	-	-	-	-
Share of profits paid to Canada	-	150	60	23	8	1,738
Total income	4,647	20,513	26,248	35,309	45,158	58,718
Total expenditure	4,099	17,487	23,778	28,581	37,908	48,167
Net income (adjusted)	548	3,026	2,470	6,728	7,250	10,561

[1] From 1 October 1969 to 31 December 1969.

[2] Corresponds to the shift to the provision for losses on items receivable.

[3] Estimated as follows: $PRA_t = PRAA_t - PRAA_{t-1} + PEA_t$. Since the accumulated provision for claims ($PRAA$) remained constant between 1969 and 1974, $PRA_t = PEA_t$.

SOURCE EDC, *Annual Report*, various years.

Table A-7

Adjusted Amount of Interest Paid to Canada, 1969-74

	1969	1970	1971	1972	1973	1974
			($ Thousands)			
Interest paid to Canada by the EDC[1]	7,651	12,021	19,993	23,411	29,221	39,879
Less interest and fees on export loans attributable to the Canada Account	-	-	350	1,343	2,552	2,561
Adjusted balance	7,651	12,021	19,643	22,068	26,669	37,318

[1] Estimations based on data from the Public Accounts, "Statement of Earnings of the Department of Industry, Trade and Commerce," Volume 2, Section 10. The following revision is made to adjust for the difference between the government's fiscal year ending 31 March and the EDC's fiscal year ending 31 December:

$$I_t = 3/4\,\bar{I}_{t+1} + 1/4\,\bar{I}_t$$

where I_t is the amount of interest in the Public Accounts for year t.

SOURCE EDC, *Annual Report*, various years.

Table A-8

Calculation of Interest Paid to Canada by the EDC, 1969-80

	As estimated by the authors and used in tables	As provided by the EDC	Difference
	($ Thousands)		
1969	7,651	-	-
1970	12,021	13,495	(1,474)
1971	19,643	16,631	3,012
1972	22,068	21,476	592
1973	26,669	25,664	1,005
1974	37,318	34,941	2,377
1975	50,820	47,778	3,044
1976	65,743	68,644	(2,901)
1977	76,647	101,372	(24,725)
1978	76,576	71,626	4,950
1979	62,739	76,015	(13,276)
1980	49,657	58,256	(8,599)

SOURCE First column: Public Accounts, "Statement of Earnings of the Department of Industry, Trade and Commerce," Volume 2, Section 10; second column: estimates by the EDC.

B Statistical Tables for Chapter 2

Table B-1

Distribution of Exports from Selected Countries, by Type of Country of Destination, 1970 and 1979

From/to	Destination				Total
	Developed countries	Developing countries[1]	Eastern Europe	Unclassified exports	
	(Per cent)				(US$ millions)
Canada					
1970	90.8	7.5	1.7	-	16,564
1979	88.4	9.6	1.8	0.2	55,117
United State					
1970	67.2	28.7	0.8	3.3	42,590
1979	59.9	34.5	3.4	2.2	173,649
European Economic Community[2]					
1970	82.5	13.4	3.4	0.7	88,515
1979	77.3	16.4	4.5	1.6	574,140
Japan					
1970	54.5	43.1	2.4	-	19,318
1979	47.7	48.9	3.4	-	102,964

1 Includes some centrally planned countries such as China and Vietnam
2 Included six countries in 1970 and nine in 1979
SOURCE OECD. *Foreign Trade*. Series B. 1970 and 1979

Table B-2

Distribution of Exports from Selected Countries, by Product Category, 1970 and 1979

	Canada		United States		European Economic Community		Japan	
	1970	1979	1970	1979	1970	1979	1970	1979
	(Per cent)							
SITC category								
0 Food products and livestock	9.7	8.9	10.2	12.8	8.5	8.5	3.3	1.0
1 Beverages and tobacco	1.5	0.8	1.6	1.3	1.1	1.6	0.1	0.2
2 Nonedible raw materials, excluding fuel	22.0	21.1	10.8	11.9	3.8	3.0	1.7	1.2
3 Fossil fuels, lubricants, and related products	6.0	13.6	3.7	3.3	4.1	6.9	0.2	0.4
4 Oils, greases, and animal or vegetable products	0.2	0.3	1.2	1.1	0.4	0.5	0.1	0.1
5 Chemical products and related products	3.4	5.3	9.0	10.6	11.0	12.1	6.4	5.8
6 Manufactured items classified primarily by raw material	22.5	17.5	11.9	9.6	24.6	21.5	33.5	25.4
7 Machinery and transportation equipment	32.5	29.8	42.0	38.9	35.3	33.8	40.5	56.8
8 Miscellaneous manufactured items	1.7	2.4	6.1	7.1	10.2	10.4	13.3	8.1
9 Items and sales not classified elsewhere	0.6	0.3	3.5	2.4	1.0	1.7	0.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	(US$ millions)[1]							
Value	16,564	55,117	42,590	173,649	89,013	5,742,229	19,319	102,964

1 In 1970, $1 Can. = $0.980777 U.S.; in 1979, $1 Can. = $0.853947 U.S.
SOURCE OECD. *Foreign Trade*. Series B. 1970 and 1979.

Table B-3

Surplus or Deficit on Trade in Selected Product Categories,[1] Canada, 1972-80

	Merchandise trade balance	Food, feed, beverages and tobacco	Nonedible raw materials	Nonedible semi-processed goods	Nonedible finished goods
			($ Millions)		
1972	1,857	950	2,058	3,102	-4,524
1973	2,720	1,263	3,104	4,036	-6,118
1974	1,689	1,434	3,914	4,300	-8,446
1975	-451	1,525	2,928	4,194	-9.566
1976	1,388	1,416	3,134	5,946	-9,501
1977	2,730	1,310	3,574	7,860	-10,459
1978	3,601	1,437	2,947	10,322	-11,885
1979	3,972	1,989	4,843	12,340	-16,164
1980	7,953	3,371	3,502	16,574	-16,363

[1] The total merchandise trade balance follows the definitions of the balance of payment, while the components adopt those of Canadian Trade.

SOURCE Statistics Canada, cat. nos. 67-001 and 67-201.

Table B-4

Value of Exports Insured and Insurance Policies in Force at 31 December, EDC and Government, 1969-80

	Exports insured[1]			Insurance policies[2]		
	EDC	Government	Total	EDC	Government	Total
		($ Millions)			($ Thousands)	
1969	233.2	8.7	241.9			
1970	385.1	176.5	561.6			
1971	392.0	89.4	481.4			
1972	461.1	37.5	498.6	319.9	330.8	650.7
1973	539.4	25.5	564.9	330.6	298.1	628.7
1974	778.1	160.6	938.7	401.8	378.8	780.6
1975	878.9	31.8	910.7	534.8	281.5	816.3
1976	1,335.8	16.8	1,352.6	647.1	247.9	895.0
1977	1,299.5	146.4	1,445.9	653.1	353.1	1,006.2
1978	2,949.5	30.7	2,980.2	1,427.9	556.6	1,984.5
1979	1,980.4	104.5	2,084.9	1,332.1	338.3	1,670.4
1980	2,582.7	112.6	2,695.3	1,512.7	201.4	1,714.1

[1] Includes exports insured and financed.

[2] Excludes investment insurance.

SOURCE EDC, *Annual Report*, various years.

Table B-5

Distribution of Canadian Exports Insured by the EDC,[1] by Region of Destination, 1969-80

	European Economic Community[2]	Other European countries	Africa	Far East	Middle East	United States	Central America and Caribbean	South America	Oceania	Total	Total value
					(Per cent)						($ Millions)
1969	–[3]	36.6	4.2	8.3	2.0	10.7	12.6	16.5	9.1	100	242
1970	–	28.4	3.5	5.4	11.6	9.0	8.8	27.4	5.9	100	562
1971	–	30.0	4.1	10.3	5.3	14.6	8.6	20.6	6.5	100	481
1972	–	42.4	2.2	6.6	4.4	14.8	7.7	16.3	5.6	100	499
1973	–	43.2	2.3	6.2	5.1	13.8	8.7	14.1	6.6	100	565
1974	–	36.4	14.8	5.4	5.0	11.7	7.1	13.7	5.9	100	939
1975	32.8	10.0	5.5	9.4	7.5	9.0	10.3	10.4	5.1	100	911
1976	26.7	11.6	16.8	8.8	8.4	10.9	7.6	5.5	3.6	100	1,353
1977	27.5	11.6	16.9	9.4	8.2	7.3	7.8	7.2	4.1	100	1,446
1978	–	29.3	4.6	8.6	46.3[4]	7.6	–[5]	3.6	–[6]	100	2,980
1979	–	50.9	7.9	12.3	5.7	15.7	–	7.5	–	100	2,085
1980	33.1	10.9	10.7	9.8	6.3	13.1	4.5	6.2	5.4	100	2,695

[1] Includes exports insured by the EDC on its own behalf and for the federal government account.

[2] The number of member countries in the EEC changed from six to nine over the period.

[3] Where no figure is shown, the data are included with those for other European countries.

[4] This figure is unusually high primarily because of two large projects launched in Saudi Arabia that year.

[5] Where no figure is shown, the data are included with those for the United States.

[6] Where no figure is shown, the data are included with those for the Far East.

SOURCE EDC, *Annual Report*, various years.

Table B-6

Distribution of Canadian Exports Insured by the EDC, by Product Category, 1969-80

	Forest products	Agri-cultural products	Other manu-factured products	Services	Machinery	Minerals, metals, and chemical products	Trans-portation equipment	Textiles and consumer goods	Electronic equipment	Total	Total value
						(Per cent)					($ Millions)
1969[1]	33.0	9.0	12.3	0.6	9.4	21.4	2.1	9.8	2.4	100.0	233
1970	23.6	23.5	7.5	1.2	6.1	16.5	14.8	5.5	1.3	100.0	562
1971	32.1	22.8	6.0	0.6	5.9	15.4	6.6	7.5	1.1	100.0	481
1972	35.3	13.5	13.1	0.8	6.0	17.5	3.9	8.5	1.4	100.0	499
1973	35.3	10.7	13.5	1.3	6.9	20.1	5.6	4.7	2.2	100.0	565
1974	34.0	21.4	7.1	2.2	6.9	16.3	6.7	3.1	2.3	100.0	939
1975	39.2	9.4	8.6	7.0	9.6	14.7	7.1	3.2	1.2	100.0	911
1976	30.9	3.5	18.8	11.6	10.2	12.3	8.9	2.8	1.0	100.0	1,353
1977	35.4	13.1	13.6	10.1	9.4	8.5	3.7	3.7	2.5	100.0	1,446
1978	20.0	2.2	8.2	32.6	7.3	4.2	9.4	1.1	15.0	100.0	2,980
1979	34.2	2.5	12.0	7.3	22.4	9.9	5.9	3.4	2.4	100.0	2,085
1980	38.2	2.5	6.2	9.7	7.7	20.8	6.6	3.7	4.6	100.0	2,695

[1] EDC insurance issued on its own behalf only for 1969.

SOURCE EDC, *Annual Report*, various years.

Table B-7

Claims Paid and Recovered on Export Insurance Approved by the EDC on Its Own Behalf, 1969-80

	Claims paid	Claims recovered	Claims written off	Claims outstanding at year end
		($ Thousands)		
1969	849	331	-	-
1970	610	907	-	-
1971	3,274	2,841	217	216
1972	2,209	2,425	119	4,435
1973	5,475	3,548	195	5,028
1974	1,906	2,715	312	3,907
1975	1,591	2,460	59	2,979
1976	2,295	680	434	4,160
1977	3,047	1,193	852	5,162
1978	6,490	5,839	(118)	5,931
1979	3,798	664	218	8,847
1980	10,382	1,555	1,165	16,509

Source EDC, *Annual Report*, various years.

Table B-8

Distribution of Export-Insurance Policies in Force at 31 December, by Value of Policy, 1971-80

	Less than $100,000	From $100,001 to $250,000	From $250,001 to $1,000,000	More than $1,000,000	Total
			(Per cent)		
1971	54.0	19.6	18.0	8.4	100
1972	53.2	18.9	19.5	8.4	100
1973	51.2	19.4	19.7	9.7	100
1974	44.9	21.8	22.0	11.3	100
1975	40.8	24.3	22.4	12.5	100
1976	38.0	26.0	21.0	15.0	100
1977	39.0	22.4	21.1	17.5	100
1978	34.9	20.1	22.2	22.8	100
1979	32.0	14.4	25.7	27.9	100
1980	31.5	16.6	23.8	28.1	100

Source EDC, *Annual Report*, various years.

Table B-9

EDC Export Loans,[1] 1969-80

	Approved during the year			Outstanding at 31 December[2]		
	EDC	Government	Total	EDC	Government	Total
			(C$ millions)[3]			
1969	65.3	0.0	65.3	250.4	0.0	250.4
1970	96.6	4.0	100.6	289.8	0.0	289.8
1971	240.0	100.0	340.0	374.7	10.1	384.8
1972	283.3	0.0	283.3	489.5	32.7	522.2
1973	462.9	0.0	462.9	579.6	37.9	617.5
1974	502.2	157.2	659.4	787.0	33.6	820.6
1975	885.0	250.0	1,135.0	1,020.0	47.5	1,067.5
1976	736.0	25.5	761.5	1,343.2	94.7	1,437.9
1977	1,087.5	94.9	1,182.4	1,838.1	212.4	2,050.5
1978	1,671.9	87.8	1,759.7	2,268.7	333.2	2,601.9
1979	1,992.1	80.7	2,072.8	3,169.7	5,366.0	3,706.3
1980	901.8	26.9	928.7	3,615.2	678.2	4,293.4

[1] Includes associated or related bank financing and guarantees.

[2] For 1978, 1979, and 1980, outstanding EDC loans amounted to $2,262.4 million, $2,822.7 million, and $3,426.6 million, respectively; guarantees amounted to $6.3 million, $347.0 million, and $188.6 million, respectively. For the same years, outstanding government loans amounted to $309.1 million, $494.9 million, and $636.9 million, respectively; guarantees amounted to $24.1 million, $41.7 million, and $41.3 million, respectively. This breakdown is not available for years prior to 1978.

[3] Loans approved in U.S. dollars have been converted into Canadian dollars at the current exchange rate, except for years prior to 1976, when parity was assumed between the currencies.

Source EDC, *Annual Report*, various years.

Table B-10

EDC Loan Disbursements and Repayments, Current Year Flows, 1969-80

	Disbursements			Repayments			Total net disbursements
	EDC	Government	Total	EDC	Government	Total	
				($ Millions)			
1969	55.0	0.0	55.0	27.1	0.0	27.1	27.9
1970	70.7	0.0	70.7	27.8	0.0	27.8	42.9
1971	109.4	10.1	119.5	24.1	0.0	24.1	95.4
1972	147.6	22.6	170.2	32.5	0.0	32.5	137.7
1973	136.2	7.5	213.7	46.2	2.3	48.5	165.2
1974	266.8	0.8	267.6	66.8	4.7	71.5	196.1
1975	326.5	18.3	344.8	76.5	4.2	80.7	264.1
1976	451.9	51.8	503.7	107.2	6.4	113.6	390.1
1977	580.3	115.2	695.5	129.0	8.1	137.1	558.4
1978	581.7	115.8	697.5	180.0	11.2	191.2	506.3
1979	758.1	198.2	956.3	191.0	12.5	203.5	752.8
1980	801.9	157.2	959.1	245.3	18.0	263.3	695.8

SOURCE EDC, *Annual Report*, various years.

Table B-11

Distribution of Export Loans Approved by the EDC and Government, by Region of Destination of Exports, 1969-1980[1]

	United States	Mexico	Central America and Caribbean	South America	Asia	Africa	Western Europe	Eastern Europe	Oceania	Middle East	Total	Total value
						(Per cent)						($ Millions)
1969	0.0	27.4	0.0	8.1	37.7	0.0	12.3	14.5	0.0	0.0	100.0	65.3
1970	0.0	15.9	13.2	13.1	4.9	0.0	19.9	9.1	0.0	23.9	100.0	96.6
1971	0.0	0.0	4.3	3.5	2.1	1.2	48.3	2.2	7.1	31.3	100.0	340.0
1972	0.0	8.6	6.9	41.1	4.0	1.9	4.7	21.9	0.0	10.9	100.0	283.3
1973	3.9	16.6	18.5	15.3	5.0	18.4	12.9	1.3	0.0	8.1	100.0	462.9
1974	0.0	2.9	12.0	35.5	2.8	14.2	8.0	2.8	7.3	14.5	100.0	659.4
1975	0.3	8.5	30.9	0.4	30.1	5.5	3.6	4.7	0.1	16.0	100.0	1,135.0
1976	0.0	0.0	15.3	10.7	28.7	17.7	7.4	19.8	0.2	0.2	100.0	784.3
1977	0.5	0.2	0.3	6.3	5.2	14.9	1.9	46.4	0.6	23.7	100.0	1,182.4
1978	3.3	0.6	0.8	3.2	0.5	49.9	0.8	39.9	0.0	1.0	100.0	3,650.2
1979	7.2	0.5	4.9	7.7	11.8	3.6	2.4	60.8	1.1	0.0	100.0	2,072.8
1980	23.7	9.8	3.7	11.6	15.9	15.6	11.5	3.8	0.8	3.6	100.0	928.7

[1] The distribution by region corresponds to the list of signed agreements mentioned in the annual reports. For 1978, the total for signed agreements does not agree with that for the total of loans approved appearing in Table B-9 because of subsequent cancellations.

SOURCE EDC, *Annual Report*, various years.

Table B-12

Loans, Confirmed Guarantees, and Lines of Credit Approved by the EDC on Its Own Behalf, by Country of Destination of Exports, 1961-80

	Total loans approved	Disbursements	Repayments	Undisbursed credits
		($ Millions)		
Algeria	2,001.6	282.6	21.7	1,719.0
Romania	990.1	208.2	5.3	781.9
Mexico	439.0	318.2	181.1	120.8
United States	423.0	310.1	19.9	112.9
Czechoslovakia	301.8	226.9	2.8	74.9
Korea	297.5	164.7	14.5	132.8
U.S.S.R.	259.7	259.1	36.6	0.6
Iran	252.0	132.5	24.9	119.5
Indonesia	237.6	237.6	38.6	0.0
Poland	236.0	191.1	5.7	44.9
Turkey	234.7	226.8	19.7	7.9
Israel	205.2	142.9	24.3	62.3
Argentina	197.6	122.7	33.0	74.9
Venezuela	147.4	100.6	33.8	46.8
Peru	145.9	109.3	23.9	36.6
Yugoslavia	122.8	100.0	54.8	22.8
Brazil	122.2	89.8	29.5	32.4
Panama	119.8	114.2	76.8	5.6
Britain	117.0	110.1	86.3	6.9
India	115.3	115.3	79.1	0.0
Ireland	102.2	60.7	6.8	41.5
Others	1,519.6	1,531.2	492.8	212.0
Total	8,588.0	4,930.1	1,315.7	3,657.0

SOURCE EDC, *Annual Report 1980*.

Table B-13

Average Cost of Insurance Provided by the EDC,[1] 1971-80

	Value of insured exports (1)	Insurance in force on December 31 (2)	Premiums and fees earned (3)	Average cost (3) ÷ (1)	Average cost (3) ÷ (2)
		($ Millions)		(Per cent)	
1971	392		1.7	0.433	
1972	461	320	1.7	0.368	0.531
1973	539	331	1.9	0.352	0.574
1974	778	402	3.1	0.398	0.771
1975	879	535	3.2	0.364	0.598
1976	1,336	647	3.5	0.336	0.695
1977	1,299	653	5.7	0.438	0.872
1978	2,950	1,428	9.7	0.328	0.679
1979	1,980	1,332	10.4	0.525	0.780
1980	2,583	1,513	11.5	0.445	0.760
Average				0.399	0.695

[1] On its own behalf only.

SOURCE Table A-6; and EDC, *Annual Report*, various years.

Table B-14

Differentiated Interest-Rate System in Selected Countries, 1976-80

	1 July 1976	1 January 1977	1 July 1977	1 January 1978	1 July 1978	1 January 1979	1 July 1979	1 January 1980
				(Per cent)				
Austria	8.50	8.50	8.50	8.75	7.75	7.75	7.50	8.00
Belgium	8.75	9.00	8.50	8.50	8.00	8.50	9.00	10.25
Canada	9.25	8.25	8.50	8.50	9.00	9.25	9.50	10.50
Denmark	12.75	14.25	16.25	16.75	16.75	16.50	15.25	16.50
France	10.00	10.75	10.75	11.00	10.50	9.75	9.75	11.75
West Germany	8.00	7.25	6.50	6.00	5.75	6.25	7.25	7.75
Italy	12.50	13.50	14.50	14.25	13.50	13.25	13.75	14.25
Japan	8.50	8.50	7.25	6.25	6.00	6.00	7.00	8.00
The Netherlands	8.25	8.00	7.75	7.75	7.25	7.75	8.50	8.75
Sweden	9.00	9.25	9.50	9.75	10.00	10.00	10.00	10.25
Switzerland	5.00	4.25	4.00	3.75	3.25	3.00	3.00	3.50
Britain	12.50	14.50	12.50	10.50	11.50	12.50	12.50	13.25
United States	6.75	6.25	6.75	7.00	7.50	8.00	8.25	9.00

SOURCE EDC, special tabulation.

C Statistical Tables for Chapter 3

Table C-1

Canadian Banks and Syndicated Loans, 1979 and 1980

	Syndicated loans				Rank			
	Number		Value		In Canada		In the world	
	1979	1980	1979	1980	1979	1980	1979	1980
			(US$ millions)					
Bank of Montreal	57	62	3,681	2,748	1	1	5	3
Royal Bank of Canada	31	48	904	1,389	2	3	24	17
Canadian Imperial Bank of Commerce	13	40	719	2,114	3	2	30	8
Bank of Nova Scotia	10	26	528	1,150	4	4	43	21
Toronto-Dominion Bank	10	28	467	852	5	5	48	30
National Bank of Canada	-	18	-	742	-	6	-	33
Total value			6,299	8,995				

SOURCE Pitfield Mackay Ross Ltd. (1981), p. 9.

Table C-2

International Assets as a Share of Total Assets, Five Canadian Banks, 1976-80

	1976	1977	1978	1979	1980
			(Per cent)		
Royal Bank of Canada	29.5	31.4	30.9	29.7	32.5
Canadian Imperial Bank of Commerce	24.3	25.4	27.8	28.9	31.6
Bank of Montreal	22.5	22.6	25.3	26.2	28.7
Bank of Nova Scotia	36.6	38.7	41.4	44.2	47.4
Toronto-Dominion Bank	35.8	36.2	37.7	38.1	37.9
Average	29.7	30.9	32.6	33.4	35.6

SOURCE Pitfield Mackay Ross Ltd. (1981).

Table C-3

After-Tax Profits from Foreign Sources as a Share of Total Profits, Five Canadian Banks, 1976-80

	1976	1977	1978	1979	1980
			(Per cent)		
Royal Bank of Canada	27.6	32.7	31.7	34.1	44.4
Canadian Imperial Bank of Commerce	18.7	22.4	21.3	28.3	44.0
Bank of Montreal	27.2	28.6	26.3	27.4	31.0
Bank of Nova Scotia	35.2	39.5	39.8	45.0	58.6
Toronto-Dominion Bank	25.2	28.3	29.1	39.1	44.8
Average	26.8	30.3	29.5	34.8	44.6

SOURCE Pitfield Mackay Ross Ltd. (1981), pp. 32-40.

Table C-4

Net and Gross Public Export Credits to Developing Countries, DAC Countries and Canada, 1970-80

	Net			Gross		
		Canada			Canada	
	DAC total	Value	Share of DAC total	DAC total	Value	Share of DAC total
	(US$ millions)		(Per cent)	(US$ millions)		(Per cent)
1970	577.8	40.5	7.0	1,497.0	67.4	4.5
1971	573.2	59.9	10.4	1,763.4	84.0	4.8
1972	724.2	109.3	15.1	2,065.5	146.0	7.1
1973	1,117.0	67.8	6.1	2,485.7	114.4	4.6
1974	691.2	141.6	20.5	2,586.6	205.5	7.9
1975	1,370.8	151.7	11.1	3,219.9	257.6	8.0
1976	1,822.7	325.7	17.9	3,776.2	442.6	11.7
1977	2,128.1	367.0	17.2	4,700.2	546.6	11.6
1978	3,044.2	359.8	11.8	5,971.3	477.0	8.0
1979	1,191.5	396.5	33.3	5,828.2	1,011.4	17.4
1980	2,101.3	634.2	30.2	7,137.2	1,461.1	20.5

SOURCE OECD, *Development Co-operation*, various years.

Table C-5

Net and Gross Public Export Credits to Developing Countries, DAC Countries (Including Private Credits from France) and Canada, 1970-80

	Net			Gross		
		Canada			Canada	
	DAC total	Value	Share of DAC total	DAC total	Value	Share of DAC total
	(US$ millions)		(Per cent)	(US$ millions)		(Per cent)
1970	881.5	40.5	4.6	2,487.0	67.4	2.7
1971	795.2	59.9	7.5	2,816.2	84.0	3.0
1972	995.2	109.3	11.0	3,486.4	146.0	4.2
1973	1,471.2	67.8	4.6	4,513.7	114.4	2.5
1974	958.9	141.6	14.8	4,288.7	205.5	4.8
1975	1,922.3	151.7	7.9	5,524.6	257.6	4.7
1976	3,311.5	325.7	9.8	7,087.1	442.6	6.2
1977	3,913.3	367.0	9.4	8,750.0	546.6	6.2
1978	5,037.4	359.8	7.1	9,956.6	477.0	4.8
1979	2,992.2	396.5	13.2	10,729.6	1,011.4	9.4
1980	4,737.9	634.2	13.4	12,515.4	1,461.1	11.7

SOURCE OECD, *Development Co-operation*, various years

Table C-6

Net and Gross Private Export Credits to Developing Countries, DAC Countries and Canada, 1970-80

	Net			Gross		
		Canada			Canada	
	DAC total	Value	Share of DAC total	DAC total	Value	Share of DAC total
	(US$ millions)		(Per cent)	(US$ millions)		(Per cent)
1970	2,141.9	109.6	5.1	5,216.8	129.6	2.5
1971	2,831.3	84.1	3.0	6,508.3	141.0	2.2
1972	1,447.8	-8.7	-	6,063.0	61.0	1.0
1973	1,195.7	-19.8	-	6,937.9	63.5	0.9
1974	2,480.8	111.4	4.5	8,696.6	178.6	2.1
1975	4,141.9	-4.1	-	11,689.4	80.7	0.7
1976	5,423.8	-14.3	-	15,179.2	74.1	0.5
1977	8,490.6	68.1	0.8	18,146.1	134.5	0.7
1978	9,886.0	-67.2	-	21,767.5	12.4	0.1
1979	10,044.7	-42.3	-	22,797.9	18.5	0.1
1980	12,567.7	-38.7	-	27,772.8	42.2	0.2

SOURCE OECD, *Development Co-operation*, various years

Table C-7

Net and Gross Private Export Credits to Developing Countries, DAC Countries (Excluding France) and Canada, 1970-80

	Net			Gross		
		Canada			Canada	
	DAC total	Value	Share of DAC total	DAC total	Value	Share of DAC total
	(US$ millions)		(Per cent)	(US$ millions)		(Per cent)
1970	1,838.2	109.6	6.0	2,729.8	129.6	4.7
1971	2,609.3	84.1	3.2	3,692.1	141.0	3.8
1972	1,176.8	-8.7	-	2,576.6	61.0	2.4
1973	841.5	-19.8	-	2,424.2	63.5	2.6
1974	2,213.1	111.4	5.0	4,407.9	178.5	4.1
1975	3,590.2	-4.1	-	6,164.8	80.7	1.3
1976	3,935.0	-14.3	-	8,092.1	74.1	0.9
1977	6,705.4	68.1	1.0	9,396.1	134.5	1.4
1978	7,892.8	-67.2	-	11,810.9	12.4	0.1
1979	8,244.0	-42.3	-	12,068.3	18.5	0.2
1980	9,931.1	-38.7	-	15,257.4	42.2	0.3

SOURCE OECD, *Development Co-operation*, various years

D Rates of Return on EDC Operations (Corporate Account)

Table D-1

Data for Assessing EDC Returns, 1974-80[1]

	1974	1975	1976	1977	1978	1979	1980
				($ Thousands)			
Net income	9,533	10,382	16,282	16,847	31,730	42,185	30,670
Total assets (including accumulated provision)	867,229	1,141,367	1,436,455	1,858,777	2,359,183	3,176,500	3,778,756
Loans (and guarantees)							
Interest and fees earned	48,807	68,944	94,514	125,088	165,668	206,531	258,815
Provision for losses on loans[2]	2,052	2,456	3,276	3,818	3,728	5,815	5,945
Interest expense	38,159	54,107	72,260	102,284	126,468	168,334	242,529
Loans receivable (including accumulated provision for losses)	796,244	1,041,815	1,369,405	1,751,235	2,125,725	2,655,387	3,251,626
Accumulated provision for losses on loans	7,962	10,418	13,694	17,512	21,240	27,055	33,000
Insurance (and guarantees)							
Premiums and fees earned	3,055	3,198	4,452	5,652	9,643	10,399	11,486
Provision for claims	65	1,615	1,528	1,109	2,192	8,085	4,121
Claims paid less claims recovered	(810)	(869)	1,616	1,854	651	3,134	8,827
Accumulated provision for claims	3,376	5,880	5,771	5,026	6,567	11,528	6,823
Investments							
Interest earned	6,343	7,240	5,803	8,224	7,902	53,083	77,627
Interest expense	4,620	5,952	5,395	7,803	9,351	30,943	48,667
Investments	68,887	96,204	63,304	102,330	228,022	507,257	504,883
Administrative expenses	3,776	4,870	6,028	7,103	9,744	14,641	15,996
Total borrowing (including accrued interest payable)	759,359	986,361	1,239,738	1,609,770	1,956,399	2,628,231	3,188,266
Loans from Canada (including accrued interest payable)[3]	724,534	971,452	1,044,457	1,084,838	944,571	811,404	657,865
Interest paid to Canada[4]	37,318	50,820	65,743	76,647	76,576	62,739	49,657
Other assets	2,098	3,348	3,746	5,212	5,436	13,856	22,247
Other liabilities	13,792	15,606	17,848	25,218	41,996	49,520	59,811
Including the Canada Account	4,201	3,561	3,632	4,220	4,331	3,413	5,441
Equity	82,740	123,122	159,404	201,251	332,981	460,166	490,836
Capital invested by the federal government[5]	811,475	1,098,135	1,207,493	1,290,309	1,281,833	1,274,983	1,154,142
Number of employees in loan activities	110*	148*	177	143*	266*	291*	325*
Number of employees in investment activities	8*	10	20	22*	24*	26*	28
Number of employees in insurance activities	75	69	64	147	103	118	141
Total	193	227	261	312	393	435	494
				(Per cent)			
Interest on the federal public debt[6]	6.497	7.699	8.312	8.848	8.919	8.995	9.880
GNE deflator (1971=100)	132.1	146.3	160.2	171.5	182.4	201.3	222.7

*Estimated by the authors.

1 Flow variables from 1 January to 31 December; stock variable at 31 December, as taken from the revised financial statements given in Appendix A. Data for 1974 come from the *Annual Report 1975*.

2 As revised in the EDC prospectus, Ottawa, 12 March 1980, p. 21, for the years 1974-78. The net profits, accumulated provision for losses on loans, and equity for the same years were adjusted accordingly.

3 For the years 1976 to 1978, the accrued interest payable to Canada is excluded from the loans from Canada, since it is impossible to separate this from the accrued interest payable to other lenders.

4 Estimated on the basis of data from the Public Accounts, "Statement of Earnings of the Department of Industry, Trade and Commerce," Volume 2, Section 10. The following correction is made to adjust for the difference between the government's fiscal year ending 31 March and the EDC's fiscal year ending 31 December:

$$I_t = 3/4\,\bar{I}_{t+1} + 1/4\,\bar{I}_t$$

where I_t is the amount of interest in the Public Accounts for year t. We subtract from this interest the amount generated by financing activities for the government account (Canada Account). For the years 1979 and 1980, the interest paid to Canada is available in EDC, *Annual Report*, various years; it amounted to $65.938 million and $59.800 million, respectively. For consistency, the Public Accounts series has been retained.

5 Equal to the sum of loans from the federal government, equity, and other amounts due to the Canada Account.

6 The federal public debt includes domestic debt in the form of treasury bonds, marketable bonds, and Canada Savings Bonds, as well as the foreign debt, including drawings on existing credit agreements as estimated on the basis of data supplied by the Financial Markets Group, Department of Finance.

SOURCE EDC, *Annual Report*, various years.

Table D-2

Data for Assessing EDC Returns, 1969-74[1]

	1969	1970	1971	1972	1973	1974
			($ Thousands)			
Net income[2]	548	3,026	2,470	6,728	7,250	10,551
Total assets (including accumulated provision)	293,283	348,120	442,054	750,153	679,781	871,816
Loans (and guarantees)						
Interest and fees earned	3,743	15,970	20,980	29,554	37,382	49,065
Provision for losses on loans[3]	309	1,311	1,391	1,352	2,255	997
Interest expense	3,250	14,264	17,929	24,014	30,584	41,781
Loans receivable (including accumulated provision for losses)[4]	254,903	294,800	383,449	499,366	591,045	800,831
Accumulated provision for losses on loans[5]	309	1,620	3,011	4,363	5,618	6,615
Insurance (and guarantees)						
Premiums and fees earned	271	1,379	1,726	1,668	1,875	3,310
Provision for claims[6]	120	(297)	1,988	(288)	1,927	(809)
Claims paid less claims recovered	120	(297)	1,988	(288)	1,927	(809)
Accumulated provision for claims[7]	6,000	6,000	6,000	6,000	6,000	6,000
Investments						
Interest earned	633	3,164	3,542	4,087	5,901	6,343
Interest expense	n/a	n/a	n/a	n/a	n/a	n/a
Investments	37,733	51,560	58,025	70,551	88,400	68,887
Administrative expenses	420	2,017	2,410	3,480	4,134	4,460
Total borrowing (including accrued interest payable)	256,910	294,886	377,832	497,241	537,272	764,175
Loans from Canada (including accrued interest payable)[8]	256,910	294,886	377,832	452,363	571,868	724,386
Interest paid to Canada[9]	7,651	12,021	19,643	22,068	26,669	37,318
Other assets	647	1,760	580	236	336	2,098
Other liabilities	5,286	7,810	4,937	5,547	6,639	10,223
Including the Canada Account	3,267	3,366	60	23	8	1,738
Equity[2,5,7]	24,778	37,804	50,274	57,002	74,252	84,803
Capital invested by the federal government[10]	284,955	336,056	428,166	509,388	646,128	810,927
Number of employees in loan activities	83	83	83*	106	114*	110*
Number of employees in investment activities	5	5	5*	5	7*	8
Number of employees in insurance activities	58	58	58	67	73	75
Total	146	146	146	178	194	193
			(Per cent)			
Interest on the federal public debt[11]	8.335	5.885	6.040	5.959	6.032	6.497
GNE deflator (1971=100)	92.6	96.9	100.0	105.0	114.6	132.1

---

*Estimated by the authors.

[1] Flow variables from 1 October to 31 December for 1969, and from 1 January to 31 December for 1970-74; stock variables at 31 December as taken from the revised financial statements given in Appendix A. Data for 1974 come from the *Annual Report* of the same year.

[2] The net earnings attributable to the government account, as well as the provision for losses on loans, have been deducted from the net income appearing in the joint financial statements; the equity is estimated on the basis of the adjusted retained earnings.

[3] Corresponds to the transfer to the provision for losses on receivables.

[4] Includes loans receivable maturing in one year for the government account for 1969-71.

[5] Corresponds to the provision for losses on receivables; the equity appearing in the financial statements is therefore reduced by this same amount.

[6] Estimated as follows: $PRA_t = PRAA_t + PRAA_{t-1} + PEA_t$

where PRA_t = provision for claims in year t,
$PRAA_t$ = accumulated provision for claims in year t,
PEA_t = claim settlements and recoveries in year t.

Since $PRAA_t$ remains constant throughout the period, $PRA_t = PEA_t$.

[7] Corresponds to the provision for claims on credit-insurance contracts; the equity appearing in the financial statements is therefore reduced by the same amount.

[8] Includes loans and advances from Canada maturing in one year for the government account for 1969-71.

[9] Estimated on the basis of data from the Public Accounts, "Statement of Earnings for the Department of Industry, Trade and Commerce," Volume 2, Section 10. The following correction is made to correct for the difference in the government's fiscal year ending 31 March and the EDC's fiscal year ending 31 December:

$$I_t = 3/4\,\bar{I}_{t-1} + 1/4\,\bar{I}_t$$

where I_t is the amount of interest in the Public Accounts for year t. We subtract from this interest the amount generated by financing activities for the government account (Canada Account).

[10] Equal to the sum of loans from the federal government, equity, and other amounts due to the Canada Account.

[11] The federal public debt includes domestic debt in the form of treasury bonds, marketable bonds, and Canada Savings Bonds, as well as foreign debt, including drawings under existing credit agreements, as estimated on the basis of data supplied by the Financial Markets Group, Department of Finance.

SOURCE EDC, *Annual Report*, various years.

Table D-3

Interest Rates and Outstanding Government of Canada Debt, Average for the Year Ending 31 March,[1] 1969-81

	Treasury bonds		Marketable bonds		Canada Savings Bonds		Foreign debt[4]	
	Value	Interest rate[2]	Value	Interest rate	Value	Interest rate[3]	Value	Interest rate
	($ Millions)	(Per cent)	($ Millions)	(Per cent)	($ Millions)	(Per cent)	($ Millions)	(Per cent)
1969	2,755	6.45	12,003	5.07	5,985	5.36	402	5.22
1970	2,883	7.61	12,284	5.34	6,183	6.19	451	5.54
1971	3,463	6.03	12,572	5.61	6,886	6.87	359	5.29
1972	3,826	3.77	13,229	5.68	8,573	7.64	337	5.04
1973	4,053	3.79	13,369	5.72	10,168	7.36	322	5.28
1974	4,588	5.84	13,287	5.82	10,664	7.65	259	5.41
1975	5,421	8.14	14,083	6.20	11,068	9.44	214	5.14
1976	6,058	7.97	14,896	6.45	13,980	10.47	176	6.25
1977	7,461	9.17	16,517	7.08	15,718	10.58	160	6.25
1978	9,681	7.59	19,704	7.48	16,943	11.40	244	5.74
1979	12,660	9.31	23,645	7.82	18,607	10.50	4,690	8.10
1980	14,783	12.43	29,476	8.48	18,714	10.83	4,919	6.99
1981	19,737	13.67	36,561	9.59	16,709	12.06	4,714	7.13

1 The annual volumes of debt are the averages of figures at the end of each month.

2 Estimated as a discount rate.

3 Beginning in 1969, compound interest rate bonds were introduced; since the averages in this table are computed as simple interest rates, they may overestimate the actual rate.

4 Includes marketable bonds, term loans and drawings on lines of credit.

SOURCE Based on data supplied by the Department of Finance.

Table D-4

Data for Assessing the Return on EDC Activities for the Canada Account, 1969-80[1]

	Loans and guarantees		Insurance and guarantees		
	Interest and fees earned	Loans receivable	Premiums and fees earned	Claims paid less claims recovered	Administrative expenses
			($ Millions)		
1969	-	-	27	-	n/a
1970	-	-	450	-	n/a
1971	350	10,134	530	-	n/a
1972	1,343	33,349	587	-	n/a
1973	2,552	38,753	647	-	n/a
1974	2,561	34,507	2,259	-	n/a
1974	2,561	34,507	912	(69)	684
1975	4,244	48,815	1,180	-	771
1976	7,123	96,148	1,547	-	1,201
1977	1,570	182,113	1,729	-	1,731
1978	20,045	292,527	2,269	561	2,089
1979	30,681	484,743	2,317	103	3,129
1980	49,525	628,296	1,864	144	3,239

1 Flow variables from 1 October to 31 December for 1969, from 1 January to 31 December for 1970-80; stock variables at 31 December.

SOURCE EDC, *Annual Report*, various years.

Table D-5

Gross Return on EDC Assets, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
								(Per cent)						
Loans														
Gross revenue	$rL_t^{(1)}$	5.8	6.2	6.7	6.9	7.1	7.5	7.8	8.0	8.5	8.6	8.8	7.4	8.2
Provision for losses excluded	$rL_t^{(2)}$	5.4	5.8	6.4	6.7	7.0	7.3	7.6	7.9	8.4	8.5	8.6	7.2	8.1
Investments	rC_t	7.1	6.5	6.4	7.4	8.1	8.8	7.3	9.9	4.8	14.4	15.3	8.7	10.1
Loans and investments														
Gross revenue	$rLC_t^{(1)}$	6.0	6.2	6.7	6.9	7.2	7.6	7.8	8.1	8.3	9.4	9.7	7.6	8.5
Provision for losses excluded	$rLC_t^{(2)}$	5.6	5.9	6.4	6.8	7.1	7.4	7.6	8.0	8.1	9.3	9.6	7.4	8.3
Loans and insurance														
Net settlements on claims excluded	$rLA_t^{(1)}$	8.3	6.0	7.0	6.8	7.6	7.9	8.0	8.2	9.0	8.9	8.8	7.7	8.5
Provision excluded	$rLA_t^{(2)}$	5.8	5.6	6.8	6.6	7.5	7.4	7.9	8.1	8.8	8.5	8.9	7.5	8.3
Net settlements and accumulated provision excluded	$rLA_t^{(3)}$	6.4	6.1	7.1	6.8	7.6	7.9	8.1	8.3	9.0	8.9	8.9	7.7	8.5
Provision excluded	$rLA_t^{(4)}$	6.0	5.7	6.9	6.7	7.6	7.5	7.9	8.1	8.8	8.6	8.9	7.5	8.3
All activities														
Net settlements on claims excluded	$r_t^{(1)}$	6.5	6.2	7.0	6.9	7.7	8.0	8.0	8.3	8.7	9.7	9.8	7.9	8.8
Provision for losses and claims excluded	$r_t^{(2)}$	6.1	5.8	6.8	6.8	7.6	7.6	7.9	8.2	8.5	9.4	9.9	7.7	8.6
Other assets included, settlements excluded	$r_t^{(3)}$	6.5	6.1	7.0	6.9	7.7	8.0	8.0	8.3	8.7	9.6	9.8	7.9	8.7
Other assets included, provision excluded	$r_t^{(4)}$	6.1	5.8	6.8	6.8	7.6	7.6	7.8	8.2	8.5	9.3	9.8	7.7	8.5

SOURCE Estimates by the authors.

Table D-6

EDC Net Return, with Administrative Expenses Distributed on the Basis of Gross Earnings, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
								(Per cent)						
Loans														
Gross earnings	$\overline{rL}_t^{(1)}$	5.2	5.6	6.0	6.2	6.5	7.0	7.4	7.6	8.1	8.2	8.4	6.9	7.8
Provision for losses excluded	$\overline{rL}_t^{(2)}$	4.6	5.2	5.8	6.1	6.4	6.8	7.2	7.4	8.0	8.0	8.2	6.7	7.6
Investments	$\overline{rC}_t$	6.4	5.9	5.7	6.7	7.5	8.2	6.9	9.4	4.5	13.7	14.6	8.1	9.6
Loans and investments														
Gross earnings	$\overline{rLC}_t^{(1)}$	5.4	5.7	6.0	6.3	6.6	7.1	7.4	7.7	7.8	8.9	9.3	7.1	8.0
Provision for losses excluded	$\overline{rLC}_t^{(2)}$	5.0	5.3	5.8	6.1	6.5	7.0	7.2	7.5	7.7	8.8	9.2	6.9	7.9
Loans and insurance														
Net settlements on claims excluded	$\overline{rLA}_t^{(1)}$	5.7	5.4	6.4	6.1	7.0	7.4	7.6	7.8	8.5	8.4	8.4	7.2	8.0
Provision excluded	$\overline{rLA}_t^{(2)}$	5.2	5.0	6.1	5.9	6.9	7.0	7.4	7.7	8.3	8.1	8.4	6.9	7.8
Net settlements and accumulated provision excluded	$\overline{rLA}_t^{(3)}$	5.8	5.5	6.4	6.2	7.1	7.5	7.6	7.8	8.5	8.5	8.4	7.2	8.1
Provision excluded	$\overline{rLA}_t^{(4)}$	5.3	5.1	6.2	6.0	7.0	7.0	7.4	7.7	8.3	8.1	8.5	7.0	7.8
Net settlements and total costs excluded	$\overline{\overline{rLA}}_t^{(1)}$	5.6	5.3	6.3	6.0	6.9	7.4	7.5	7.8	8.5	8.3	8.3	7.1	8.0
Provision and total costs excluded	$\overline{\overline{rLA}}_t^{(2)}$	5.1	4.9	6.0	5.8	6.9	6.9	7.3	7.7	8.3	7.9	8.3	6.8	7.7
Net settlements, accumulated provision, and total costs excluded	$\overline{\overline{rLA}}_t^{(3)}$	5.7	5.4	6.4	6.1	7.0	7.4	7.6	7.8	8.5	8.3	8.3	7.1	8.0
Provision and total costs excluded	$\overline{\overline{rLA}}_t^{(4)}$	5.2	5.0	6.1	5.9	6.9	6.9	7.4	7.7	8.3	8.0	8.4	6.9	7.8
All activities														
Net settlements on claims excluded	$\bar{r}_t^{(1)}$	5.9	5.5	6.4	6.3	7.1	7.5	7.6	7.9	8.2	9.1	9.3	7.3	8.3
Provision for losses and claims excluded	$\bar{r}_t^{(2)}$	5.5	5.2	6.1	6.1	7.0	7.1	7.4	7.8	8.0	8.8	9.4	7.1	8.1
Other assets included, settlements excluded	$\bar{r}_t^{(3)}$	5.9	5.5	6.3	6.3	7.1	7.5	7.5	7.9	8.2	9.1	9.3	7.3	8.3
Other assets included, provision excluded	$\bar{r}_t^{(4)}$	5.5	5.2	6.1	6.1	7.0	7.1	7.4	7.8	8.0	8.8	9.3	7.1	8.1

SOURCE Estimates by the authors.

Table D-7

Net Return on EDC Assets, with Administrative Costs Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average	
													1970-80	1975-80
								(Per cent)						
Loans														
Gross earnings	$\overline{rL}_t^{(1)}$	5.4	5.8	6.2	6.4	6.7	7.2	7.5	7.8	8.2	8.2	8.4	7.1	7.9
Provision for losses excluded	$\overline{rL}_t^{(2)}$	4.9	5.4	6.0	6.2	6.6	7.0	7.3	7.6	8.1	8.1	8.3	6.9	7.7
Investments	$\overline{rC}_t$	6.9	6.3	6.2	7.2	7.8	8.5	6.7	9.3	4.4	14.2	15.2	8.4	9.7
Loans and investments														
Gross earnings	$\overline{rLC}_t^{(1)}$	5.6	5.9	6.2	6.5	6.8	7.3	7.5	7.9	7.9	9.0	9.4	7.3	8.2
Provision for losses excluded	$\overline{rLC}_t^{(2)}$	5.2	5.5	6.0	6.4	6.7	7.1	7.3	7.7	7.8	8.9	9.3	7.1	8.0
Loans and insurance														
Net settlements on claims excluded	$\overline{rLA}_t^{(1)}$	5.6	5.3	6.3	6.0	7.0	7.4	7.6	7.8	8.5	8.3	8.3	7.1	8.0
Provision excluded	$\overline{rLA}_t^{(2)}$	5.1	5.0	6.0	5.9	6.9	6.9	7.4	7.7	8.3	8.0	8.4	6.9	7.8
Net settlements and accumulated provision excluded	$\overline{rLA}_t^{(3)}$	5.7	5.4	6.4	6.1	7.0	7.4	7.6	7.8	8.5	8.4	8.3	7.2	8.0
Provision excluded	$\overline{rLA}_t^{(4)}$	5.3	5.0	6.1	5.9	6.9	7.0	7.4	7.7	8.3	8.0	8.4	6.9	7.8
All activities														
Net settlements on claims excluded	$\bar{r}_t^{(1)}$	5.9	5.5	6.4	6.3	7.1	7.5	7.6	7.9	8.2	9.1	9.3	7.3	8.3
Provision for losses and claims excluded	$\bar{r}_t^{(2)}$	5.5	5.2	6.1	6.1	7.0	7.1	7.4	7.8	8.0	8.8	9.4	7.1	8.1
Other assets included, settlements excluded	$\bar{r}_t^{(3)}$	5.9	5.5	6.3	6.3	7.1	7.5	7.5	7.9	8.2	9.1	9.3	7.3	8.3
Other assets included, provision excluded	$\bar{r}_t^{(4)}$	5.5	5.2	6.1	6.1	7.0	7.1	7.4	7.8	8.0	8.8	9.3	7.1	8.1

SOURCE Estimates by the authors.

Table D-8

Net Return on Capital Invested in the EDC by the Government, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average	
													1970-80	1975-80
								(Per cent)						
Net settlements on claims excluded	$rG_t^{(1)}$	5.2	6.0	6.3	6.0	6.6	6.8	7.3	7.6	8.7	8.6	6.5	6.9	7.6
Provision excluded	$rG_t^{(2)}$	4.8	5.8	6.1	5.9	6.6	6.4	7.1	7.5	8.4	8.2	6.6	6.7	7.4

SOURCE Estimates by the authors.

Table D-9

EDC Balance Sheet for Insurance Operations and Related Guarantees, 1970-80

Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
							($ Thousands)						
$RA_t^{(1)}$	1,676.0	-262.0	1,956.0	-52.0	4,119.0	4,067.0	2,836.0	3,798.0	8,992.0	7,265.0	2,659.0	3,368.5	4,936.2
$RA_t^{(2)}$	1,676.0	-262.0	1,956.0	-52.0	4,119.0	1,583.0	2,924.0	4,543.0	7,451.0	2,304.0	7,365.0	3,055.2	4,361.7
$\overline{RA}_t^{(1)}$	1,540.4	-420.5	1,791.6	-223.6	3,867.6	3,870.8	2,579.8	3,509.1	8,479.1	6,701.1	2,130.9	3,075.1	4,545.2
$\overline{RA}_t^{(2)}$	1,540.4	-420.5	1,791.6	-223.6	3,867.6	1,386.8	2,667.8	4,254.1	6,938.1	1,740.1	6,836.9	2,761.8	3,970.7
$\widetilde{RA}_t^{(1)}$	874.7	-1,219.4	646.1	-1,607.6	2,385.8	2,586.7	1,357.9	451.4	6,438.2	3,293.4	-1,906.7	1,209.1	2,036.8
$\widetilde{RA}_t^{(2)}$	874.7	-1,219.4	646.1	-1,607.6	2,385.8	102.7	1,445.9	1,196.4	4,897.2	-1,667.6	2,799.3	895.8	1,462.3
							(Per cent)						
$RA_t^{(1)}/VA_t$	121.5	-15.2	117.3	-2.8	124.4	127.2	63.7	67.2	93.2	69.9	23.1	71.8	74.1
$RA_t^{(2)}/VA_t$	121.5	-15.2	117.3	-2.8	124.4	49.5	67.7	80.4	77.3	22.2	64.1	64.0	59.9
$\overline{RA}_t^{(1)}/VA_t$	111.7	-24.4	107.4	-11.9	116.8	121.0	57.9	62.1	87.9	64.4	18.6	64.7	68.7
$\overline{RA}_t^{(2)}/VA_t$	111.7	-24.4	107.4	-11.9	116.8	43.4	59.9	75.3	72.0	16.7	59.5	56.9	54.5
$\widetilde{RA}_t^{(1)}/VA_t$	63.4	-70.6	38.7	-85.7	72.1	80.9	30.5	8.0	66.8	31.7	-16.6	19.9	33.5
$\widetilde{RA}_t^{(2)}/VA_t$	63.4	-70.6	38.7	-85.7	72.1	3.2	32.5	21.2	50.8	-16.0	24.4	12.2	19.3

1 $RA_t^{(1)}$ = premiums and fees on insurance less (net) claims settlements.
$RA_t^{(2)}$ = premiums and fees on insurance less reserve for claims.
$\overline{RA}_t^{(1)}$ = $RA_t^{(1)}$ less administrative costs obtained through the gross-revenues method.
$\widetilde{RA}_t^{(1)}$ = $RA_t^{(1)}$ less administrative costs obtained through the employees method.
$\overline{RA}_t^{(2)}$ et $\widetilde{RA}_t^{(2)}$ are obtained in a similar manner from $RA_t^{(2)}$.

SOURCE Estimates by the authors.

Table D-10

EDC Net Return Adjusted for the GNE Deflator, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
								(Per cent)						
Loans	$\overline{rL}_t^{(2)}$	0.3	2.2	1.0	-2.9	-8.7	-3.8	-2.2	0.6	1.7	-2.3	-2.3	-1.5	-1.4
Investments	$\overline{rC}_t$	2.3	3.1	1.2	-1.9	-7.4	-2.2	-2.8	2.3	-1.9	3.8	4.5	0.1	0.6
Loans and investments	$\overline{rLC}_t^{(2)}$	0.6	2.3	1.0	-2.8	-8.5	-3.7	-2.2	0.7	1.4	-1.5	-1.3	-1.3	-1.1
Loans and insurances	$\overline{rLA}_t^{(2)}$	0.5	1.8	1.0	-3.3	-8.4	-3.8	-2.1	0.6	2.0	-2.4	-2.3	-1.5	-1.3
All Activities	$\bar{r}_t^{(2)}$	0.8	2.0	1.1	-3.0	-8.2	-3.7	-2.1	0.7	1.7	-1.5	-1.2	-1.2	-1.0
	$\bar{r}_t^{(4)}$	0.8	2.0	1.1	-3.0	-8.2	-3.7	-2.1	0.7	1.7	-1.6	-1.3	-1.2	-1.0
Government capital	$rG_t^{(2)}$	0.2	2.6	1.1	-3.3	-8.7	-4.3	-2.4	0.4	2.1	-2.2	-4.0	-1.7	-1.7

SOURCE Estimates by the authors.

Table D-11

EDC Financial Cost of Public Debt Less Net Return, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
							(Per cent)							
Loans	$\overline{rL}_t^{(2)}$	1.0	0.6	-0.0	-0.2	-0.1	0.7	1.0	1.2	0.6	0.9	1.6	0.7	1.1
Investments	$\overline{rC}_t$	-1.0	-0.3	-0.2	-1.2	-1.3	-0.8	1.6	-0.5	4.5	-5.2	-5.3	-0.9	-0.9
Loans and investments	$\overline{rLC}_t^{(2)}$	0.7	0.5	-0.0	-0.3	-0.2	0.6	1.0	1.1	1.1	0.1	0.6	0.5	0.8
Loans and insurance	$\overline{rLA}_t^{(2)}$	0.7	1.1	-0.1	0.2	-0.4	0.8	0.9	1.2	0.6	1.0	1.5	0.7	1.0
All activities	$\bar{r}_t^{(2)}$	0.4	0.8	-0.2	-0.1	-0.5	0.6	0.9	1.0	0.9	0.2	0.5	0.4	0.7
	$\bar{r}_t^{(4)}$	0.4	0.8	-0.2	-0.1	-0.5	0.6	1.0	1.1	0.9	0.2	0.5	0.4	0.7
Government capital	$rG_t^{(2)}$	1.0	0.3	-0.2	0.2	-0.1	1.3	1.2	1.4	0.5	0.8	3.3	0.9	1.4

SOURCE Estimates by the authors.

Table D-12

EDC Opportunity Cost Less Real Net Return, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	Opportunity cost	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average	
														1970-80	1975-80
								(Per cent)							
Loans	$\overline{rL}_t^{(2)}$	10.0	9.7	7.8	9.0	12.9	18.7	13.8	12.2	9.4	8.3	12.3	12.3	11.5	11.4
		7.0	6.7	4.8	6.0	9.9	15.7	10.8	9.2	6.4	5.3	9.3	9.3	8.5	8.4
		4.0	3.7	1.8	3.0	6.9	12.7	7.8	6.2	3.4	2.3	6.3	6.3	5.5	5.4
Investments	$\overline{rC}_t$	10.0	7.7	6.9	8.8	11.9	17.4	12.2	12.8	7.7	11.9	6.2	5.5	9.9	9.4
		7.0	4.7	3.9	5.8	8.9	14.4	9.2	9.8	4.7	8.9	3.2	2.5	6.9	6.4
		4.0	1.7	0.9	2.8	5.9	11.4	6.2	6.8	1.7	5.9	0.2	-0.5	3.9	3.4
Loans and investments	$\overline{rLC}_t^{(2)}$	10.0	9.4	7.7	9.0	12.8	18.5	13.7	12.2	9.3	8.6	11.5	11.3	11.3	11.1
		7.0	6.4	4.7	6.0	9.8	15.5	10.7	9.2	6.3	5.6	8.5	8.3	8.3	8.1
		4.0	3.4	1.7	3.0	6.8	12.5	7.7	6.2	3.3	2.6	5.5	5.3	5.3	5.1
Loans and insurance	$\overline{rLA}_t^{(2)}$	10.0	9.5	8.2	9.0	13.3	18.4	13.8	12.1	9.4	8.0	12.4	12.3	11.5	11.3
		7.0	6.5	5.2	6.0	10.3	15.4	10.8	9.1	6.4	5.0	9.4	9.3	8.5	8.3
		4.0	3.5	2.2	3.0	7.3	12.4	7.8	6.1	3.4	2.0	6.4	6.3	5.5	5.3
All activities	$\bar{r}_t^{(2)}$	10.0	9.2	8.0	8.9	13.0	18.2	13.7	12.1	9.3	8.3	11.5	11.2	11.2	11.0
		7.0	6.2	5.0	5.9	10.0	15.2	10.7	9.1	6.3	5.3	8.5	8.2	8.2	8.0
		4.0	3.2	2.0	2.9	7.0	12.2	7.7	6.1	3.3	2.3	5.5	5.2	5.2	5.0
	$\bar{r}_t^{(4)}$	10.0	9.2	8.0	8.9	13.0	18.2	13.7	12.1	9.3	8.3	11.6	11.3	11.2	11.0
		7.0	6.2	5.0	5.9	10.0	15.2	10.7	9.1	6.3	5.3	8.6	8.3	8.2	8.0
		4.0	3.2	2.0	2.9	7.0	12.2	7.7	6.1	3.3	2.3	5.6	5.3	5.2	5.0
Government capital	$rG_t^{(2)}$	10.0	9.8	7.4	8.9	13.3	18.7	14.3	12.4	9.6	7.9	12.2	14.0	11.7	11.7
		7.0	6.8	4.4	5.9	10.3	15.7	11.3	9.4	6.6	4.9	9.2	11.0	8.7	8.7
		4.0	3.8	1.4	2.9	7.3	12.7	8.3	6.4	3.6	1.9	6.2	8.0	5.7	5.7

SOURCE Estimates by the authors.

Table D-13

Amount of Subsidization in Current Dollars Estimated from the Difference between the Financial Cost of Public Debt and the Net Return of the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
							(Millions of current dollars)							
Loans	$\overline{rL}_t^{(2)}$	2.6	2.1	-0.0	-1.1	-0.7	6.7	12.1	18.7	15.8	21.9	46.5	11.3	20.3
Investments	$\overline{rC}_t$	-0.5	-0.1	-0.2	-1.0	-1.0	-0.7	1.3	-0.4	7.4	-19.1	-26.7	-3.7	-6.4
Loans and investments	$\overline{rLC}_t^{(2)}$	2.1	2.0	-0.2	-2.1	-1.8	6.1	13.3	18.3	23.2	2.8	19.8	7.6	13.9
Loans and insurance	$\overline{rLA}_t^{(2)}$	2.1	3.7	-0.3	0.9	-2.7	7.0	11.1	17.9	11.4	24.4	44.6	10.9	19.4
All activities	$\bar{r}_t^{(2)}$	1.3	3.2	-0.9	-0.5	-4.1	6.0	11.9	17.1	18.3	4.5	17.0	6.7	12.5
	$\bar{r}_t^{(4)}$	1.3	3.3	-0.8	-0.4	-4.1	6.2	12.2	17.5	18.8	5.3	18.8	7.1	13.1
Government capital	$rG_t^{(2)}$	3.2	1.0	-0.9	0.9	-0.5	12.3	13.8	17.0	6.4	10.1	39.7	9.4	16.5

SOURCE Estimates by the authors.

Table D-14

Amount of Subsidization in Current Dollars Estimated from the Difference between the Opportunity Cost and the Real Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	Opportunity cost	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
(Millions of current dollars)															
Loans	$\overline{rL}_t^{(2)}$	10.0	26.6	26.2	39.5	69.7	128.8	125.5	145.6	145.4	158.5	290.9	360.8	138.0	204.5
		7.0	18.4	16.1	26.4	53.5	108.1	98.2	109.8	99.1	101.0	219.9	273.1	102.1	150.2
		4.0	10.2	6.0	13.3	37.3	87.4	70.9	74.0	52.7	43.4	148.9	185.4	66.3	95.9
Investments	$\overline{rC}_t$	10.0	3.4	3.8	5.7	9.5	13.7	10.1	10.2	6.4	19.7	22.7	27.7	12.1	16.1
		7.0	2.1	2.1	3.7	7.1	11.4	7.6	7.8	3.9	14.8	11.6	12.5	7.7	9.7
		4.0	0.8	0.5	1.8	4.7	9.0	5.1	5.4	1.4	9.8	0.6	-2.7	3.3	3.3
Loans and investments	$\overline{rLC}_t^{(2)}$	10.0	30.0	30.0	45.2	79.2	142.5	135.6	155.8	151.8	178.2	313.6	388.5	250.0	220.6
		7.0	20.5	18.3	30.1	60.6	119.5	105.8	117.6	103.0	115.7	231.6	285.6	109.8	159.9
		4.0	10.9	6.5	15.1	42.0	96.4	76.0	79.4	54.2	53.2	149.5	182.7	69.6	99.2
Loans and insurance	$\overline{rLA}_t^{(2)}$	10.0	26.6	28.2	39.8	72.5	127.9	126.3	145.3	145.1	154.6	294.4	359.9	138.2	204.3
		7.0	18.2	18.0	26.5	56.1	107.1	98.9	109.3	98.6	96.8	223.2	271.9	102.2	149.8
		4.0	9.8	7.7	13.2	39.7	86.2	71.9	73.3	52.1	39.1	151.9	183.9	66.2	95.3
All activities	$\bar{r}_t^{(2)}$	10.0	29.2	31.2	44.5	80.8	140.1	135.5	154.4	150.6	173.3	315.2	385.7	149.1	219.1
		7.0	19.6	19.5	29.5	62.2	117.1	105.7	116.2	101.8	110.8	233.2	282.8	108.9	158.4
		4.0	10.1	7.7	14.4	43.6	94.0	75.9	78.0	53.0	48.3	151.2	179.9	68.7	97.7
	$\bar{r}_t^{(4)}$	10.0	29.3	31.4	44.6	80.8	140.4	136.0	155.1	151.4	174.2	317.2	389.4	150.0	220.6
		7.0	19.7	19.6	29.5	62.2	117.3	106.2	116.8	102.4	111.5	234.9	286.0	109.7	159.6
		4.0	10.2	7.8	14.5	43.6	94.3	76.3	78.5	53.5	49.8	152.6	182.5	69.3	98.7
Government capital	$rG_t^{(2)}$	10.0	30.4	28.3	41.5	76.7	136.2	136.9	142.8	119.5	102.0	155.4	170.2	103.6	137.8
		7.0	21.1	16.9	27.5	59.3	114.4	108.3	108.2	82.0	63.5	117.0	133.8	77.5	102.1
		4.0	11.8	5.4	13.4	42.0	92.5	79.6	73.6	44.6	24.9	78.7	97.4	51.3	66.5

SOURCE Estimates by the authors.

Table D-15

Amount of Subsidization in 1980 Dollars Estimated from the Difference between the Financial Cost of Public Debt and the Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1970-80	Average 1975-80
							(Millions of 1980 dollars)							
Loans	$\overline{rL_t}^{(2)}$	6.0	4.7	-0.1	-2.2	-1.2	10.3	16.8	24.2	19.3	24.3	46.5	13.5	23.6
investments	$\overline{rC_t}$	-1.1	-0.3	-0.3	-1.9	-1.8	-1.0	1.8	-0.5	9.1	-21.2	-26.7	-4.0	-6.4
Loans and investments	$\overline{rLC_t}^{(2)}$	4.9	4.4	-0.4	-4.0	-3.0	9.2	18.6	23.7	28.4	3.1	19.8	9.5	17.1
Loans and insurance	$\overline{rLA_t}^{(2)}$	4.8	8.3	-0.7	1.7	-4.6	10.6	15.4	23.3	14.0	27.0	44.6	13.1	22.5
All activities	$\bar{r}_t^{(2)}$	2.9	7.1	-1.8	-0.9	-7.0	9.1	16.5	22.2	22.4	4.9	17.0	8.4	15.4
	$\bar{r}_t^{(4)}$	3.1	7.3	-1.8	-0.9	-6.9	9.4	17.0	22.7	23.0	5.9	18.8	8.9	16.1
Government capital	$rG_t^{(2)}$	7.4	2.2	-1.8	1.8	-0.9	18.7	19.2	22.1	7.8	11.1	39.7	11.6	19.8

SOURCE Estimates by the authors.

Table D-16

Amount of Subsidization in 1980 Dollars Estimated from the Difference between the Opportunity Cost and the Real Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80

	Rate of return	Opportunity cost	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average	
														1970-80	1975-80
									(Millions of 1980 dollars)						
Loans	$\overline{rL}_t^{(2)}$	10.0	61.1	58.4	83.8	135.5	217.1	191.0	202.4	188.8	193.6	321.9	360.8	183.1	243.1
		7.0	42.2	35.9	56.0	104.0	182.2	149.4	152.6	128.7	123.3	243.3	273.1	135.5	178.4
		4.0	23.4	13.4	28.1	72.5	147.4	107.9	102.9	68.5	53.0	164.8	185.4	87.9	113.7
Investments	$r\overline{C}_t$	10.0	7.9	8.4	12.0	18.4	23.1	15.4	14.2	8.3	24.1	25.1	27.7	16.8	19.1
		7.0	4.8	4.7	7.9	13.8	19.1	11.6	10.9	5.1	18.0	12.9	12.5	11.0	11.8
		4.0	1.8	1.1	3.8	9.1	15.2	7.8	7.5	1.9	12.0	0.7	-2.7	5.3	4.5
Loans and investments	$\overline{rLC}_t^{(2)}$	10.0	69.0	66.8	95.8	153.9	240.3	206.4	216.6	197.1	217.6	346.9	388.5	199.9	262.2
		7.0	47.1	40.7	63.9	117.7	201.4	161.1	163.5	133.7	141.3	256.2	285.6	146.6	190.2
		4.0	25.1	14.5	31.9	81.6	162.5	115.7	110.4	70.3	64.9	165.4	182.7	93.2	118.3
Loans and insurance	$\overline{rLA}_t^{(2)}$	10.0	61.1	62.9	84.4	140.8	215.7	192.3	202.0	188.5	188.7	325.7	359.9	183.8	242.9
		7.0	41.8	40.0	56.1	109.0	180.5	150.5	152.0	128.1	118.2	246.9	271.9	135.9	177.9
		4.0	22.5	17.1	27.9	77.1	145.3	108.8	101.9	67.7	47.7	168.1	183.9	88.0	113.0
All activities	$\bar{r}_t^{(2)}$	10.0	67.0	69.5	94.5	157.0	236.2	206.2	214.6	195.6	211.6	348.8	385.7	198.8	260.4
		7.0	45.1	43.4	62.5	120.9	197.4	160.9	161.5	132.2	135.3	258.0	282.8	145.4	188.4
		4.0	23.1	17.2	30.6	84.7	158.5	115.6	108.4	68.8	59.0	167.3	279.9	92.1	116.5
	$\bar{r}_t^{(4)}$	10.0	67.4	69.9	94.6	157.1	236.7	207.1	215.6	196.6	212.7	350.9	389.4	199.8	262.0
		7.0	45.4	43.7	62.6	120.9	197.8	161.6	162.3	133.0	136.2	259.9	286.0	146.3	189.8
		4.0	23.3	17.4	30.7	84.8	158.9	116.2	109.1	69.4	59.6	168.8	182.5	92.8	117.6
Government capital	$rG_t^{(2)}$	10.0	69.9	63.1	88.1	149.0	229.7	208.4	198.5	155.2	124.6	171.9	170.2	148.0	171.5
		7.0	48.5	37.5	58.2	115.3	192.8	164.8	175.4	106.5	77.5	129.5	133.8	110.4	127.1
		4.0	27.1	12.0	28.4	81.6	156.0	121.2	102.3	57.9	30.4	87.0	97.4	72.8	82.7

SOURCE Estimates by the authors.

E Export Credit Systems in Foreign Countries

This appendix gives a brief description of the export-financing programs implemented outside Canada. Our purpose is to show that different government structures have been established to promote exports, so as to provide a better perspective on the EDC's own structure. The links between the public and private sectors in other countries are emphasized, in order to stimulate debate on this subject.[1]

With respect to insurance operations, it has already been pointed out that few private companies directly provide export credit insurance. However, direct private-sector involvement is found in the following countries:

- In the United States, the Foreign Credit Insurance Association (FCIA) is comprised of more than 50 private insurance companies. It covers commercial risks related to exports and, on behalf of the Eximbank, administers the insurance policies in which risks are noncommercial (political). In some cases,[2] the FCIA may be reinsured by the Eximbank for commercial risks. In addition, Lloyds and the American Insurance Group offer credit-insurance services for exports to the United States.
- In West Germany, Hermes is a private insurance company that manages export-credit insurance policies for the government, while accepting some commercial risks on its own behalf. It appears that some other private companies also cover commercial risks but mainly for trade with other industrialized countries.
- In Italy, some private insurance companies cover short-term commercial risks, although they can be reinsured by SACE, an independent section of the state corporation, the Istituto Nazionale delle Assicurazioni (INA).
- In the Netherlands, the Nederlandsche Crediet-verzekering Maatschappij N.V. (NCM) is a private company that insures export credits and occasionally obtains reinsurance from the government when the risks are outside the private sector.

Table E-1 lists the various insurance companies that cover export credits throughout the world, stressing the role of the private sector in each case.

As this table demonstrates, private-sector activity in the field of export-credit insurance is fairly limited. However, we do find that some government agencies have private-sector representatives (from financial institutions, insurance companies, or business circles) sitting on their board of directors.

In light of these facts, a degree of optimism appears to be warranted with respect to the current attempts by the private sector in Canada to break into the field of export-credit insurance. One hopes that the EDC (or the government) will provide incentives to assist these companies in joining its operations in this area.

Let us now turn to export financing proper. To better illustrate our analysis of the various systems, Table E-2 lists the export-credit agencies, as well as their specific characteristics and their links with the private sector.

As in Canada, public export-credit systems generally do not cover short-term credit, which is left to the banks. Only a few countries offer short-term rediscounting facilities to the banks – Austria and Belgium, for example. In Austria, the Österreichische Exportfonds specializes in the refinancing of short-term export credits. In Belgium, the Institut de réescompte et de garantie (IRG) rediscounts export-related commercial paper for up to two years.

In West Germany, the Ausfuhrkredit-G.m.b.H. (AKA) – a consortium of more than 50 banks – provides lines of credit in three forms: lines A, B, and C. In line B, the exporter can obtain credits with maturities ranging between one and four years, and these can be rediscounted by the Bundesbank. The maximum financing is 70 per cent of the sales value, however; and in 1978 the total granted under any line of credit could not exceed DM3 billion.

Our study of the various systems has revealed that the private sector in Canada is probably more removed from the decision-making process in government export financing than anywhere else. In all other industrialized countries, the government appears to encourage greater bank participation in export financing.

This encouragement takes many forms. In some countries, the government agency provides the banks with rediscounting facilities. In France, the Banque de France and the Banque française du commerce extérieur (BFCE), a semi-public agency, rediscount the loans of bank institutions for terms ranging up to seven years (COFACE insurance is compulsory for financing that exceeds three years). Beyond seven years, the BFCE lends directly to the supplier or purchaser. In the Netherlands, the central bank offers rediscounting to commercial banks for medium- and long-term credits.

In other countries, the government agency lends to banks rather than to exporters. This is the general procedure for the Mediocredito Centrale in Italy, which manages a program of fixed preferential rates for the commercial banks.

In Britain, the Export Credits Guarantee Department gives the banks full latitude and covers the difference between the rate charged by the banks

Table E-1

Export Credit Insurance in Various Countries, 1982

	Agencies
Australia	Export Finance and Insurance Corporation (EFIC), 1974 — Agency reporting to the Ministry of Foreign Trade insuring export risks that the private sector does not cover.
Austria	Österreichische Kontrollbank A.G. (OKB), 1946 — Mixed private and public sector agency insuring export credits on behalf of the Ministry of Finance. — Agency has twelve shareholders: ten private credit institutions and two nationalized banks.
Belgium	Office national du Ducroire (OND), 1939 — Public credit insurance establishment with government guarantees which insures or reinsures commercial and political risks.
Britain	Export Credits Guarantee Department (ECGD), 1919 — Reports to the Secretary of State for Commerce. — Board of directors composed of bankers and businesspeople.
Denmark	Export Credit Council (EKR), 1960 — Public agency under the authority of the Ministry of Commerce. — Board includes representatives from various sectors of the economy.
	Danish International Development Agency (DANIDA), 1962 — Also under the authority of the Ministry of Commerce. — Insures exports to developing countries.
Finland	Export Guarantee Board (VTL), 1962 — Government agency attached to the Ministry of Commerce and Industry. — Board of directors includes representatives from the industry and trade sectors.
France	Compagnie française d'assurance pour le commerce extérieur (COFACE), 1946 — Independent parapublic corporation which guarantees commercial risks on its own behalf and manages the credit insurance service for the government.
Italy	Special Section for Export Credit Insurance (SACE), 1977 — Independent section of the Istituto Nazionale delle Assicurazioni (INA), 1912. — Government insurance agency that manages insurance, reinsurance, and guarantee programs for the government.
Japan	Export Insurance Division (EID) of the Ministry of International Trade and Industry (MITI), 1930 — Insures export credits.
The Netherlands	Nederlandsche Credietverzekering Maatschappij (NCM), 1925 — Private insurance company insuring commercial risks on its own behalf. — The Netherlands government does, however, reinsure noncommercial risks and commercial risks outside the field of private insurance.
New Zealand	Export Guarantee Office (EXGO), 1964 — Agency forming part of the State Insurance Office. — Responsible to the Ministry of Foreign Trade.
Norway	Guarantee Institute for Export Credits (GIEK), 1960 — Agency attached to the Ministry of Commerce and Merchant Marine. — Board of directors includes representatives from banks and exporters.
Spain	Spanish Export Credit Insurance Company (CESCE), 1972 — Joint public and private agency in which government is the major shareholder, with private insurance companies and financial institutions holding minority shares.
Sweden	Export Credit Guarantee Board (EKN), 1933 — Independent government agency.
United States	Foreign Credit Insurance Association (FCIA), 1961 — Association of more than 50 insurance companies in collaboration with Eximbank for noncommercial risks.
	Lloyds
	American Insurance Group (AIG)
	Overseas Private Investment Corporation — Government agency providing insurance primarily for developing countries.
West Germany	Hermes, 1919, and Treuarbeit, 1926 — Consortium of one private insurance (Hermes) and one public company (Treuarbeit) covering commercial and noncommercial risks. — Hermes also insures export credits on its own behalf.

SOURCE OECD (1982).

Table E-2

Medium- and Long-Term Export Credit Financing in Various Countries, 1982

	Agencies
Australia	Export Finance and Insurance Corporation (EFIC), 1974 — Government agency financing supplier and purchaser credit. — Financed from the consolidated fund. — Must cover its costs.
	Australian Banks' Export Refinance Corporation (ABERC), 1969 — Association of private banks. — Gives its members access to export credit refinancing.
Austria	Österreichische Kontrollbank A.G. (OKB), 1946 — Refinances export credits. — Shareholders are twelve credit institutions, two of which are nationalized banks.
Belgium	Office national du Ducroire, 1939 — Government agency. — Finances export credits in special cases.
	Creditexport, 1959 — Nonprofit association with funds provided by government institutions and banks. — Finances export credits.
	Ministère du commerce extérieur (COPROMEX) — Pays interest bonuses in some cases.
Britain	Export Credits Guarantee Department (ECGD), 1919 — Government agency. — Provides guarantees to commercial banks. — Covers the difference between a fixed rate (OECD) and previous rate (LIBOR plus margin). — Refinances some export credits when a bank has more than a specific proportion of its assets in this field.
Denmark	Danish Export Finance Corporation (DEFC), 1975 — Funds provided by the Central Bank, commercial banks, and savings co-operatives. — Grants loans for more than two years.
	Danmarks Skibskreditfond (SCFD), 1961 — Private foundation established by the central bank, the banking insurance sector and manufacturers of steel and ships. — Finances credit for exports of ships with EKR guarantees.
Finland	Bank of Finland — Rediscounts short-term credit.
	Suomen Vientiluotto Oy (OFCE), 1963 — Finances export credits. — Shares held: majority by government (55.56 per cent), by commercial banks (26.66 per cent), and by some export corporations (17.78 per cent).
France	Banque française du commerce extérieur (BFCE), 1946 — Semi-public agency. — Refinances export credits from two to seven years. — Finances credits of more than seven years.
Italy	Mediocredito Centrale (MC), 1952 — Government agency. — Refinances export credits (rediscounting). — Pays interest bonuses.
Japan	Export-Import Bank of Japan (EXIM), 1950 — Finances a portion of loans approved by banks (no direct contact with exporters).
The Netherlands	N.V. Export-Financiering-Maatschappij (EFM), 1951 — Agency created by commercial banks. — Specializes in export financing.
	Central Bank, 1967 — Provides limited rediscounting facilities. — Government also pays interest bonuses as a temporary measure.
New Zealand	Reserve Bank (RB), 1971 — Rediscounts some export credits in special cases. — Finances some loans in special cases.

Table E-2 (concl'd.)

	Agencies
Norway	Eksportfinans, 1962 — Association of commercial bank. — Finances and refinances export credits.
	Mortgage Credit Fund — Government agency. — Provides financing for foreign sales of ships.
Spain	Banco Exterior de España, 1928 — Semi-public agency: government (62 per cent), private sector (38 per cent). — Receives funds from the Instituto de Crédito Oficial (ICO). — Finances export credits. — Since 1971, banks can also register export credits in a general investment coefficient. — Some banks are required by the law to place a specified proportion of assets into export loans.
Sweden	Swedish Export Credit Corporation (SEK), 1962 — Agency owned 50 per cent by government and 50 per cent by bank. — Finances export credits. — Rediscounts bank loans.
	Sveriges Investeringsbank A.B., 1967 — Government-owned agency. — Operates on commercial basis. — Finances export credits.
United States	Export-Import Bank (Eximbank), 1934 — Government agency which grants loans (from 45 to 65 per cent), provides guarantees, finances U.S. export credits offered by foreign banks (50 per cent), and refinances banks providing fixed rates. — Board of directors composed of members of various sectors of the economy. — Must cover its costs.
	Private Export Funding Corporation (PEFCO), 1971
	Overseas Private Investment Corporation (OPIC) — Government agency providing financing primarily in the case of investment in developing countries.
West Germany	Ausfuhrkredit-G.m.b.H. (AKA), 1952 — Association of more than 50 private banks which refinances exports. — Uses three lines of credit (A, B, C). — Line B credits can be rediscounted by the Bundesbank.
	Kreditanstalt für Wiederaufbau (KfW), 1948 — Government agency created primarily for reconstruction. — Provides financing at minimum OECD rates for long-term credit (seven years). — Aimed primarily at developing countries.

SOURCE OECD (1982).

(under OECD agreements) and a rate agreed upon in advance (LIBOR plus a certain margin).[3] The ECGD also provided rediscounting facilities until 1980.

Some countries have set up semi-public agencies in which the banks are directly involved in decision-making through minority participation. This is the case in Sweden, for example, where the Swedish Export Credit Corporation (SEK) is jointly owned by the government and the banks, on a 50-50 basis. The SEK lends directly to exporters or foreign importers and rediscounts some bank loans. In Spain, the government holds a majority share in the Banco Exterior de España (62 per cent), with private banks as minority shareholders. The Banco Exterior operates as a private bank but lends solely to exporters. Finland has also created the Suomen Vientiluotto Oy, which provides rediscounting facilities to the banks.

Finally, in still other countries, the banks themselves have set up pools in which they invest resources to encourage exports. These agencies receive moral support from the government. As mentioned above, in West Germany AKA is a syndicate of more than 50 banks, and some AKA credits (line B) can be rediscounted by the Bundesbank. In 1962, Norwegian banks set up the Eksportfinans for medium- and long-term credits, which the individual banks could not insure alone. Eksportfinans rediscounts bank loans or makes loans directly to exporters.[4]

This rapid overview of the structures of foreign financing agencies thus reveals that, while Canada's goal is to maximize private-sector participation in export credits, as claimed by president Sylvain Cloutier in his "Statement of Corporate Purpose," other intervention structures are available. A transformation of structures might prove even more relevant in the Canadian case since, as we have seen, Canadian banks are strongly oriented towards the international market.

Notes

INTRODUCTION

1 "Crédit mixte" is a form of financing based on two components: a loan at fairly normal terms, and a foreign aid grant. Hence, for a given amount of capital the average interest and repayment burden is greatly reduced.

CHAPTER 1

1 Section 10 of the Export Development Corporation Act, 1969.

2 Except where otherwise indicated, the following quotations are drawn from speeches concerning the acts and amendments related to the ECIC and the EDC, as cited in Canada, Parliament, House of Commons, *Debates*, 1944 to 1980.

3 Canada, Parliament, House of Commons, Standing Committee on Finance, Trade and Economic Affairs, *Minutes of Proceedings and Evidence* (1974), 13:19. Witness: H. T. Aitken, president, Export Credits Insurance Corporation.

4 Especially the *Annual Report* for 1977-78.

5 In the next chapter, we note a gap between this statement of intention and the actual implementation of export credits.

6 Ibid. (1969), p. 2281.

7 Ibid., p. 2291. Member: Alastair Gillespie, vice-chairman of the committee.

8 Ibid., p. 2414-19. Witness: G. O. Loach, vice-president, Union Carbide Canada Limited, representing the Canadian Exporters Association.

9 Ibid., pp. 2269 and 2292. Witness: Hon. Otto Lang, Acting Minister of Industry, Trade and Commerce.

10 One of these companies was the American Credit Indemnity Company of New York, which was founded in 1924.

11 Cloutier (1980), p. 11.

12 Ibid., pp. 11-12.

13 Although this discussion belongs to Chapter 5, it is possible to infer here from the preceding analysis that the EDC has a clear choice to make. Either it can do more than the market by using resources that the market does not have, or it can operate on a strictly commercial basis but, in doing so, it departs from the supplemental role it was assigned by Parliament.

14 Canada, Department of Industry, Trade and Commerce (1979).

15 Gibson (1968), p. 10

16 Ibid., p. 11.

17 Ibid.

18 Ibid.

19 Cloutier (1980), p. 18. The representative of the EDC testifying before the House of Commons Special Committee on a National Trading Corporation in 1981 repeated the assertion: "All European countries are offering financing at less than the cost of the relevant funding." Witness: B. R. King, vice-president, Corporate Affairs, *Minutes of Proceeding*, 3 September 1980, p. 2:47.

20 Cloutier (1980), p. 18.

21 Ibid., p. 22

22 *Le Devoir*, Montreal, 6 January 1981. Referring to this measure, the EDC president stressed that it was to be used as a defensive measure by Canadian exporters to match offers by their European competitors and to give them an equal opportunity in bidding in selected situations; Sylvain Cloutier, president, EDC, speech given on 2 June 1981. This measure was first used in September 1981 to help Bombardier of Montreal to win out over France in a contract bid for a subway system in Mexico City.

CHAPTER 2

1 The differences are obviously smaller on an absolute value basis. The United States sold $39 billion to EEC countries in 1979 and purchased $34 billion.

2 While we should determine whether this is truly desirable, such an exercise is beyond the scope of this study.

3 To analyse these patterns correctly, relative price changes between products would have to be taken into account.

4 The primary sources of information on this point are two OECD publications: *Investing in Developing Countries*, an occasional publication on private investment assistance to the developing countries; and *Development Co-operation*, published annually by the OECD's Development Assistance Committee.

5 Capital flows with maturities of less than one year constitute the main exception.

6 France and Britain, for example, reported no "public" export credits. Their activities in this area are recorded as private credits. See Tables C-4 and C-5.

7 OECD, *Development Co-operation*, 1981, p. 196.

8 Ibid., p. 218.

9 *The Globe and Mail*, 1 July 1981. This was also recommended in Canada, Department of Industry, Trade and Commerce (1979), p. 34.

10 Canada, Department of Industry, Trade and Commerce (1979), pp. 32 and 33.

11 Canada, Parliament, House of Commons (1981), p. 58.

12 Finland is another example; see Knight (1981), p. 105.

13 In November 1980, EDC vice-president V. G. McKay stated that EDC insurance premiums were "the second lowest in the world, second only to Japanese exporters." (Minutes of a committee meeting of the Canadian Exporters Association.) Our first estimate for 1980 would be compatible with this statement.

14 Table B-5 does show, however, that 12.5 per cent of exports to the United States during the 1970s were insured by the EDC.

15 With the exception of forfaitage, as discussed below.

16 The House of Commons Special Committee on a National Trading Corporation recommended that the EDC offer partial guarantees to financial institutions for short-term loans; see Canada, Parliament, House of Commons (1981), p. 64.

17 Cloutier (1980), p. 19.

18 In September 1980, the EDC estimated its borrowing costs at 12 per cent and stated that the financial costs incurred by exporters were an average of 2 per cent (with significant variations). The rates charged to importers were therefore about 10 per cent. (See the minutes of a meeting between the EDC and the Canadian Exporters Association.)

19 By estimating the sum of loan disbursements for the 1961-80 period for the developed countries, we obtain 29 per cent of the total, which corroborates the results obtained in Table 2-5 for loan authorizations (see Table 2-18).

20 A verification of the maturities was made on the basis of 46 loan agreements signed in 1980, representing 61 per cent of all approved loans. The average nominal term was nine years, and the period of grace was two years and four months. Compared with 1976, the terms were shortened by approximately one year.

21 Pearce (1980), p. 51.

22 This practice is also prohibited among members of the EEC under section 92 of the Treaty of Rome.

23 Pearce's estimate for France is based on Pisani (1980); half of the French expenditures on this program are attributable to insurance for inflation risk.

24 Note that banks reduced their contributions to EDC loans from $624 million in 1979 to $77 million in 1980.

25 Exporters may occasionally adjust their prices upward and thus pass on these additional financing costs to borrowers.

26 This estimate is very close to that in Table 2-11. Estimates of the EDC's return obviously do not take into account the participation of the banks. For 1977, Table 2-11 therefore gives a return of 8.5 + 0.2 = 8.7 per cent. Table 2-12 gives 8.8 per cent for 1976 and 8.6 per cent for 1977.

27 EDC, *Annual Report 1980*.

28 Note that a large part of bilateral assistance is disbursed through loans. Most of these loans, however, are granted under the 0-10-50 formula: 0 per cent interest, a 10-year grace period before repayment, and a 50-year maturity. A 3-7-30 formula is occasionally used and, in rare cases, a 5-5-20 formula. In 1980, some 90 per cent of the loans granted (based on value) were based on the most generous formula.

29 For the 1980 calendar year; see CIDA (1980). The following data cover the board's fiscal year ending 31 July.

30 Letter from W. E. Jarvis, Chief Commissioner, Canadian Wheat Board, dated 4 May 1982.

CHAPTER 3

1 We do not analyse the private sector's presence in tender guarantees provided by banks or performance bonds delivered by surety companies.

2 Appendix E describes in greater detail most of the government agencies involved in export credit activities throughout the world, as well as their links with the private sector.

3 Hermes also operates on behalf of the government.

4 Table 3-5 lists the risks covered by private and public insurance programs. However, private insurance companies do not concern themselves with the Canadian content of exports.

5 Producers who export on a regular basis contact the international division of the banks directly. One bank indicated that its procedure would be simplified and that henceforth branch managers and business service officers would make the decisions directly, with the technical support of the international division.

6 In a case where the exporter already holds an EDC insurance policy, the operation can proceed without the intervention of the bank's international division, since the risk has become "Canadian" because it is covered by the EDC.

7 The EDC applies Canadian-content criteria, which do not concern the banks.

8 The banks may transform a draft into a "bankers' acceptance" by accepting it, which enables the exporter to receive his money immediately and enables the bank to resell the security to an investor who will hold it until maturity.

9 See Royal Bank (1975).

10 Vorbrodt (1981).

11 See Clendenning (1977).

12 See Mitchell and Dewy (1980).

13 In fact, these figures reflect only the amounts of foreign currency held by the banks. Canadian exports are

financed in part in Canadian currency, and it is impossible to identify this proportion in the existing statistics.

14 These distributions are based on the country in which the final guarantee was signed – that is, the location of the head office of the borrowing agency.

15 The minimum levels were 7.5 per cent in 1980, when market rates exceeded 12 per cent in Canada.

16 The member countries of the DAC are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

17 This assumption is exaggerated. In fact, the BFCE promotes private-sector intervention much more than the EDC.

18 EDC and Canadian Wheat Board export credits combined; see Table 2-3.

CHAPTER 4

1 Another possible approach consists in measuring the benefit to borrowers – that is, the difference between the rate charged by the private sector for similar loans and that charged by the EDC. This poses major problems, however, because export loans have special characteristics not found in other loans; thus loans with comparable conditions are not offered in other sectors. And, even more importantly, this rate measures only the private cost of funds, whereas the social cost seems to us more relevant for assessing public intervention. For discussion on this point, see McCaughey, Mintz, and Carrière (1981).

2 The figures of 10 and 7 per cent are taken, respectively, from Jenkins (1977) and Burgess (1981); considering together two unlike hypotheses, McCaughey, Mintz, and Carrière (1981) obtain 7 and 4 per cent.

3 For discussion of some of these subsidies, see Jenkins (1977).

4 As indicated above, no loss is inferred here because the EDC has never canceled a loan ($PEL_t = 0$).

5 This procedure assumes that the two activities are complementary and that ascribing capital to one or the other is a relatively arbitrary procedure. The problem can be sidestepped by ascribing capital stock to both activities.

6 The workers in the Insurance section have been assigned to insurance; those in the Treasury section, to investment; and the rest, to export loans. Note that the data for certain years are missing; they have been estimated by linear interpolation.

7 As already noted, $PEL_t = 0$.

8 Other liabilities consist primarily of reported income (payments received in advance for services not yet given). The Canada Account is an amount owed to the Canadian government for operations carried out by the EDC on its behalf. Since this sum belongs to the government, it is included under government assets.

9 For reasons discussed later, only part of the results are presented here. Detailed results are found in Dufour, Racette, and Raynauld (1982), Tables A-4.5.1 to A-4.5.4, A-4.7.1 to A-4.7.4, and A-4.9.1 to A-4.9.4.

10 For further discussion on the methodology used by Jenkins, see Campbell (1975, 1981), Sumner (1980*a*, 1980*b*), and Jenkins (1980, 1981).

11 The rates of inflation used are measured by $\Pi_t = (P_t - P_{t-1})/P_{t-1}$, where P_t is the GNE deflator for year t.

12 Detailed results are reported in Dufour, Racette, and Raynauld (1982), Tables A-4.4.1 to A-4.4.4, A-4.6.1 to A-4.6.4, A-4.8.1 to A-4.8.4, and A-4.10.1 to A-4.10.4.

13 Also, the share of costs in terms of net receipts can be distorted to the extent that the subsidy rate differs according to the activities.

14 Note, however, that to the extent that funds are re-lent to Canada's private sector, they quite probably generate taxes on the income from the capital, which tend to reduce this cost (or, more accurately, which should be taken into account in a complete cost/benefit analysis).

15 The rates for 1980 are in fact equal to the average for the 1970-80 period.

16 Since the accounts administered for Canada do not include investments, no share of FD_t has been attributed to investments.

17 Since no net income is shown in the balance sheet for the Canada Account, the net return on government capital is not estimated here.

18 The detailed results of these calculations appear in Dufour, Racette, and Raynauld (1982), Section A-5.

CHAPTER 5

1 A 1 per cent reduction in the rate of interest on a 10-year loan is equivalent in present value to a reduction in price of about 4 per cent, if the sale is fully financed and if the relevant interest rate is about 10 per cent.

2 When the EDC borrows abroad to finance its loans, the funds that it provides immediately to the exporter make the export sale identical to an export in cash; entry of capital occurs at the same time as the sale. Afterward, repayments by the importer will be offset by the EDC's repayments on its own debt, taking into account, of course, the EDC's profit or subsidy margin.

3 By definition, a useful service is a good whose value to the consumer exceeds the social cost of producing it.

4 This rule is demonstrated in Wisecarver (1974).

5 This situation is compatible with the presence of structural or frictional unemployment, but it excludes cyclical unemployment, which, by definition, is caused by deficient demand.

6 The adjustment is much more likely to be made through imports than through reductions in the other components of demand. Given the level of aggregate demand and the shortage in domestic supply following the increase in exports, the easiest and quickest solution is obviously to increase imports.

7 EDC loans cover a fairly narrow range of industries, primarily capital goods related to the transportation and communications sectors (see Table 2-7).

8 The results are quoted from an unpublished study conducted by the Department of Finance in 1982. The simulations are taken from the Bank of Canada RDXF model. Helliwell (1982) reports other results that are more favourable to fiscal policy.

9 Specifically, before-tax profits plus charitable donations and interest paid, as a ratio of total assets corrected for inflation.

10 These results should not be confused with those in Chapter 4. In this instance, we are measuring the social return on private-sector capital and are attempting to determine whether the EDC operations support private-sector operations that have the greatest social return.

11 Economic Council of Canada (1977), p. 161.

12 If the rate of incrementality is less than 1, the supply curve is no longer horizontal; see below.

13 When EDC-supported exports are capital-intensive products that are substituted for labour-intensive products, the bottom line for jobs lost and gained may be negative. No attempt has been made in this study to ascertain the facts in this regard.

14 EDC (1982), p. 68.

15 Except for predelivery policies, which apparently do not break even.

16 For a more detailed discussion of the concept of the social value of foreign currency applied to Canada, see Jenkins (1974, 1975) and Evans and Jenkins (1977). Jenkins (1977) estimated the premium added to a unit of foreign currency at 13 per cent. In a more recent study, this premium was reduced to 7 per cent; see Jenkins and Kuo (1982).

17 See Canada, Department of Industry, Trade and Commerce (1979) and Canada, Parliament, House of Commons (1981).

18 See Raynauld (1979), p. 53. The original calculations were obtained from a Treasury Board study.

CHAPTER 6

1 At 31 December 1978, the banks had 286 foreign offices in 40 different countries. See Bank for International Settlements (1980), p. 98.

APPENDIX E

1 Our description is based primarily on OECD (1982).

2 Foreign Credit Insurance Association (1978), p. 3.

3 Canadian banks appear to have a marked preference for this structure.

4 In Canada, the banks organized a similar association in the 1960s (Export Finance Corporation of Canada) to finance exports, but this association was short-lived for administrative reasons.

List of Tables and Figures

Tables

2-1 Distribution of Export Products, Selected Countries, 1979 12

2-2 Net Financial Assistance to Developing Countries Provided by Member Countries of the OECD's Development Assistance Committee and by Canada, by Type of Assistance, 1980 12

2-3 Total Canadian Capital Flows to Developing Countries, by Category, 1979 and 1980 13

2-4 Distribution of Exports and EDC Insurance Coverage, by Region of Destination, 1980 16

2-5 Share of EDC Loans Approved for Exports to the United States and Europe, 1969-80 19

2-6 Share of Canadian Exports Financed by EDC Loans, by Region of Destination, 1980 19

2-7 Value and Share of Total Value of Loans Approved by the EDC, by Product Category, 1980 20

2-8 Distribution of EDC Loans, by Length of Nominal Term, 1976 20

2-9 Anticipated Schedule for Disbursement and Repayment of EDC Loans Approved in 1976, 1976-81 21

2-10 Minimum Interest Rates and Maximum Terms for Public Export Financing as Determined in OECD "Consensus Understanding," July 1982 22

2-11 Interest Rates on Long-Term Credit for Export Assistance, Selected Countries, March 1977 and 1 September 1979 23

2-12 Estimated Gross Return on EDC Loans, 1974-80 24

2-13 EDC Balance Sheet, 31 December 1980 24

2-14 EDC Long-Term Financing Outstanding at 31 December, by Source of Funds, 1970-80 25

2-15 EDC Statement of Income and Expenditure, 31 December 1980 26

2-16 Loans Approved by SDI for Export Assistance, 1976-81 27

2-17 Canadian Official Development Assistance, 1979-80 27

2-18 Distribution of CIDA Bilateral Development Assistance and EDC Export-Financing Assistance, by Selected Characteristics of Recipient Countries, 1980 28

2-19 Gross and Net Loans Approved by the Canadian Wheat Board, Fiscal Year Ending 31 July, 1977-81 29

2-20 Canadian Wheat Board Loans Outstanding, Fiscal Year Ending 31 July, 1977-81 29

2-21 Total Government Export Financing, by Agency, 1980 29

3-1 Asset Position of Canadian Banks, 1971-80 35
3-2 Composition of International Assets of Canadian Banks, 1971-80 35
3-3 Distribution of Foreign-Currency Assets of Five Major Canadian Banks, by Region, 31 October 1980 35
3-4 Bank Participation in EDC Financing, 1972-80 36
3-5 Participation by the Public and Private Sectors in Export-Credit Insurance Operations, Canada, Since 1981 37
3-6 Summary of Services Offered by the Public and Private Sectors in Export Finance, Canada 37
4-1 Rate of Return and Rates and Amounts of Subsidization, EDC, 1970-80 Average 49
4-2 Rate of Return and Rates and Amounts of Subsidization, EDC, 1980 49
4-3 Rate of Return and Rates and Amounts of Subsidization, Consolidated Activities, EDC Corporate and Canada Accounts, 1970-80 Average 50
4-4 Rate of Return and Rates and Amounts of Subsidization, Consolidated Activities, EDC Corporate and Canada Accounts, 1980 50
5-1 EDC Loan Approvals, by Product Category, 1971-80 58
5-2 Real Economic Return, by Product Category, 1975-79 Average 58
5-3 Real Economic Return With or Without Nuclear Equipment, 1971-80 58
A-1 EDC Balance Sheet, Fiscal Year Ending 31 December, 1974-80 71
A-2 EDC Statement of Income and Expenditure, Fiscal Year Ending 31 December, 1974-80 72
A-3 Adjusted Interest Paid to Canada, 1974-80 73
A-4 Settlements and Recoveries of Claims by the EDC, 1974-80 73
A-5 EDC Balance Sheet, Fiscal Year Ending 31 December, 1969-74 74
A-6 Statement of EDC Income and Expenditure, 1969-74 75
A-7 Adjusted Amount of Interest Paid to Canada, 1969-74 75
A-8 Calculation of Interest Paid to Canada by the EDC, 1969-80 76
B-1 Distribution of Exports from Selected Countries, by Type of Country of Destination, 1970 and 1979 79
B-2 Distribution of Exports from Selected Countries, by Product Category, 1970 and 1979 79
B-3 Surplus or Deficit on Trade in Selected Product Categories, Canada, 1972-80 80
B-4 Value of Exports Insured and Number of Insurance Policies in Force at 31 December, EDC and Government, 1969-80 80
B-5 Distribution of Canadian Exports Insured by the EDC, by Region of Destination, 1969-80 81
B-6 Distribution of Canadian Exports Insured by the EDC, by Product Category, 1969-80 81
B-7 Claims Paid and Recovered on Export Insurance Approved by the EDC on Its Own Behalf, 1969-80 82
B-8 Distribution of Export-Insurance Policies in Force at 31 December, by Value of Policy, 1971-80 82
B-9 EDC Export Loans, 1969-80 82

B-10 EDC Loan Disbursements and Repayments, Current Year Flows, 1969-80 83

B-11 Distribution of Export Loans Approved by the EDC and Government, by Region of Destination of the Exports, 1969-80 83

B-12 Loans, Confirmed Guarantees, and Lines of Credit Approved by the EDC on Its Own Behalf, by Country of Destination of the Exports, 1961-80 84

B-13 Average Cost of Insurance Provided by the EDC, 1971-80 84

B-14 Differentiated Interest-Rate System in Selected Countries, 1976-80 85

C-1 Canadian Banks and Syndicated Loans, 1979 and 1980 89

C-2 International Assets as a Share of Total Assets, Five Canadian Banks, 1976-80 89

C-3 After-Tax Profits from Foreign Sources as a Share of Total Profits, Five Canadian Banks, 1976-80 89

C-4 Net and Gross Public Export Credits to Developing Countries, DAC Countries and Canada, 1970-80 89

C-5 Net and Gross Public Export Credits to Developing Countries, DAC Countries (Including Private Credits from France) and Canada, 1970-80 90

C-6 Net and Gross Private Export Credits to Developing Countries, DAC Countries and Canada, 1970-80 90

C-7 Net and Gross Private Export Credits to Developing Countries, DAC Countries (Excluding France) and Canada, 1970-80 91

D-1 Data for Assessing EDC Returns, 1974-80 95

D-2 Data for Assessing EDC Returns, 1969-74 96

D-3 Interest Rates and Outstanding Government of Canada Debt, Average for the Year Ending 31 March, 1969-81 97

D-4 Data for Assessing the Return on EDC Activities for the Canada Account, 1969-80 97

D-5 Gross Return on EDC Assets, 1970-80 98

D-6 EDC Net Return, with Administrative Expenses Distributed on the Basis of Gross Earnings, 1970-80 99

D-7 Net Return on EDC Assets, with Administrative Costs Distributed on the Basis of the Number of Employees, 1970-80 100

D-8 Net Return on Capital Invested in the EDC by the Government, 1970-80 100

D-9 EDC Balance Sheet for Insurance Operations and Related Guarantees, 1970-80 101

D-10 EDC Net Return Adjusted for the GNE Deflator, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 102

D-11 EDC Financial Cost of Public Debt Less Net Return, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 102

D-12 EDC Opportunity Cost Less Real Net Return, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 103

D-13 Amount of Subsidization in Current Dollars Estimated from the Difference between the Financial Cost of Public Debt and the Net Return of the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 104
D-14 Amount of Subsidization in Current Dollars Estimated from the Difference between the Opportunity Cost and the Real Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 105
D-15 Amount of Subsidization in 1980 Dollars Estimated from the Difference between the Financial Cost of Public Debt and the Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 106
D-16 Amount of Subsidization in 1980 Dollars Estimated from the Difference between the Opportunity Cost and the Real Net Return on the EDC, with Administrative Expenses Distributed on the Basis of the Number of Employees, 1970-80 107
E-1 Export Credit Insurance in Various Countries, 1982 112
E-2 Medium- and Long-Term Export Credit Financing in Various Countries, 1982 113

Figures

4-1 Concepts for Assessing EDC Activities 40
5-1 Supply and Demand 55
5-2 Impact of Tariffs and Subsidies on Supply and Demand of Traded Goods 63

Bibliography

AMERICAN INSURANCE GROUP. Various years. Handbooks on export insurance programs.

ANONYMOUS. 1980. "Major Competitors' Export Incentives Programs." Mimeographed. Available from the authors on request.

BALASSA, Bela. 1976. "Export Subsidies by Developing Countries: Issues of Policy." World Bank, Staff Paper 238, Washington, D.C.

BANK FOR INTERNATIONAL SETTLEMENTS. 1980. "Payment Systems in Eleven Developed Countries." Basel, February.

BANK OF ENGLAND. 1979. *Money for Exports*. London.

BANK OF MONTREAL. Annual. *Annual Report*. Montreal.

———. 1971. "Branch Manager's Guide to International Banking Services." Montreal.

BANK OF NOVA SCOTIA. Annual. *Annual Report*. Toronto.

BANK OF THE EUROPEAN FINANCIAL CORPORATION. 1980. "Multinational Export Credit Co-ordination." Paris.

BÉLANGER, Gérard, and MCILVEEN, Neil. 1980. *Rates of Return and Investment Profitability*. Department of Finance. Ottawa: Supply and Services Canada.

BOYD, John H. 1982. "Eximbank Lending: A Federal Program That Costs Too Much." *Federal Reserve Bank of Minneapolis Quarterly Review* (Winter): 1-17.

BURGESS, David F. 1981. "The Social Discount Rate for Canada: Theory and Evidence." *Canadian Public Policy* 7:383-94.

CAMPBELL, H. F. 1975. "A Benefit/Cost Rate for Evaluating Public Projects in Canada." *Canadian Public Policy* 1:171-75.

———. 1981. "Shadow Prices for the Economic Appraisal of Public Sector Expenditures." *Canadian Public Policy* 7:395-98.

CANADA. DEPARTMENT OF INDUSTRY, TRADE AND COMMERCE. 1979. *Strengthening Canada Abroad: Final Report of the Export Promotion Review Committee*. Ottawa: IT&C. [The "Hatch Report"]

———. 1980. "Export Financing Policy Review." Mimeographed. IT&C, Ottawa.

CANADA. PARLIAMENT. HOUSE OF COMMONS. Daily. *Debates*. Ottawa: Supply and Services Canada.

———. 1981. *Canada's Trade Challenge: Report of the Special Committee on a National Trading Corporation*. Ottawa: Supply and Services Canada.

———. Special Committee on a National Trading Corporation. Daily. *Minutes of Proceedings and Evidence*. Ottawa: Supply and Services Canada.

———. Standing Committee on Finance, Trade and Economic Affairs. Daily. *Minutes of Proceedings and Evidence*. Ottawa: Supply and Services Canada.

CANADA. PARLIAMENT. SENATE. Daily. *Debates*. Ottawa: Supply and Services Canada.

CANADA. STATISTICS CANADA. 1980. *Exports. Merchandise Trade*. Statistics Canada cat. no. 65-202.

CANADA. TREASURY BOARD. 1976. "Evolution of Canadian Long-Term Export Financing and the Export Development Corporation." Mimeographed. Treasury Board, Ottawa.

CANADIAN BANKERS' ASSOCIATION. 1973. "How to Finance Exports." Montreal.

CANADIAN INTERNATIONAL DEVELOPMENT AGENCY. 1976. *Canada and Development Cooperation: Annual Review, 1975-1976*. Ottawa: CIDA.

———. 1980. "Annual Aid Review 1980: Memorandum to the Development Assistance Committee of the Organisation for Economic Co-operation and Development." CIDA, Ottawa.

CLENDENNING, E. Wayne. 1977. *The Euro-Currency Markets and the International Activities of Canadian Banks*. Economic Council of Canada. Ottawa: Supply and Services Canada.

CLOUTIER, Sylvain. 1980. "Collaboration between the EDC and Canadian Banks." Mimeographed. EDC, Ottawa.

DEFOSSE, Gaston, ed. 1982. *Les exportations françaises et leur financement*. Paris: PUF.

DEZARD, J. 1981. "Export Credits: Is War Inevitable?" *Institutional Investor*, pp. 231-47.

DUFOUR, Jean-Marie; RACETTE, Daniel; and RAYNAULD, André. 1982. "Taux de rendement des activités de la Société pour l'expansion des exportations." Centre de recherche en développement économique, Université de Montréal, Montreal.

Economic Council of Canada. 1975. *Looking Outward: A New Trade Strategy for Canada*. Ottawa: Information Canada.

———. 1976. *Efficiency and Regulation: A Study of Deposit Institutions*. Ottawa: Supply and Services Canada.

———. 1977. *Living Together: A Study of Regional Disparities*. Ottawa: Supply and Services Canada.

———. 1978. *For a Common Future: A Study of Canada's Relations with Developing Countries*. Ottawa: Supply and Services Canada.

———. 1982. *Intervention and Efficiency: A Study of Government Credit and Credit Guarantees to the Private Sector*. Ottawa: Supply and Services Canada.

Evans, John. 1977. "A Financial and Economic Framework for Investment Appraisal." Mimeographed. Available from the authors on request.

———, and Jenkins, Glenn P. 1977. "An Economic Evaluation of Foreign Financing of Investments in Canada." York University and Harvard University, Working Paper, Toronto and Cambridge, Mass.

Export Development Corporation. Annual. *Annual Report*. Ottawa: EDC.

———. Various years. "Information Circular." EDC, Ottawa.

———. 1980. "Statement of Corporate Purpose." EDC, Ottawa.

———. 1982. "The Case for Official Support of Canadian Capital Goods Exports." EDC, Ottawa.

Facsym Research Limited. 1981. "Small Business Financing and Non-Bank Financial Institutions." Toronto.

Feinberg, Richard E. 1982. *Subsidizing Success: The Export-Import Bank in the U.S. Economy*. Cambridge: Cambridge University Press.

Foreign Credit Insurance Association. Annual. *Annual Report*. New York.

———. 1978. "Certain Excess Commercial Risks to the Insurance Industry." *Export Credit Insurance: The Competitive Edge*. New York: FCIA.

Gibson, J. Douglas. 1968. "Report on Export Credits and Insurance in Canada." Mimeographed. EDC, Ottawa.

The Globe and Mail, 1 July 1981, p. B4. "EDC Will Assist Small Exporters." Toronto.

Grubel, Herbert G. "Taxation and Rates of Return from U.S. Asset Holdings Abroad, 1960-69." *Journal of Political Economy* 82:469-87.

Harberger, Arnold C. 1969*a*. "On Measuring the Social Opportunity Cost of Public Funds." *The Discount Rate in Public Investment Evaluation*. Conference Proceedings of the Committee on the Economics of Water Resources Development, Report 17, 17-18 December, Denver. Denver: Western Agricultural Economics Research Council.

———. 1969*b*. "Professor Arrow on the Social Discount Rate." In *Cost-Benefit Analysis of Manpower Policies*, edited by G. G. Somers and W. D. Woods, pp. 76-88. Industrial Relations Research Centre. Kingston: Queen's University.

Helliwell, John. 1982. "Recent Evidence from Macroeconomic Models of the Canadian Economy." Mimeographed. Available from the authors on request.

Huszagh, Sandra M., and Greene, Mark R. 1982. "FCIA: Help or Hindrance to Exports?" *The Journal of Risk and Insurance* 49:257-68.

Indemnity Insurance Company of North America. Various years. Pamphlets on export insurance programs, New York.

Jenkins, Glenn P. 1974. "The Social Value of Foreign Exchange for Canada." Department of Industry, Trade and Commerce, Working Paper, Ottawa, March.

———. 1975. "The Social Cost of Foreign Exchange in an Economy with Trade Distortions and Differential Rates of Domestic Taxation." Department of Industry, Trade and Commerce, Working Paper, Ottawa, March.

———. 1977. "Capital in Canada: Its Social and Private Performance, 1965-1974." Economic Council of Canada, Discussion Paper 98, Ottawa.

———. 1980. "Discount Rates for Economic Appraisal of Public Sector Expenditures." *Canadian Public Policy* 6:549-55.

———. 1981. "The Public Sector Discount Rate for Canada: Some Further Observations." *Canadian Public Policy* 7:399-407.

———, and Kuo, B. Chun-Yan. 1982. "On Measuring the Social Opportunity Cost of Foreign Exchange for Canada." Mimeographed. Canadian Economics Association, Ottawa.

Knight, Martin. 1981. "In the Fight over Export Financing, Few Hands Are Quite Clean." *Euromoney*, September, pp. 102-12.

McCaughey, Claire; Mintz, Jack; and Carrière, Jacques. 1981. "Determining the Subsidy Element Involved with Government Credit Programs." Mimeographed. Economic Council of Canada, Ottawa.

Mitchell, W. T., and Dewy, D. L. 1980. "Some Implications of the New Bank Law." *Foreign Investor*, Spring.

National Bank of Canada. No date. "Our International Services." International Division, Montreal.

North-South Institute. 1980. *In the Canadian Interest? Third World Development in the 1980s*. Ottawa: North-South Institute.

Organisation for Economic Co-operation and Development. Annual. *Development Co-operation*. Paris: OECD.

———. Monthly. *Foreign Trade*. Series B. Paris: OECD.

———. 1976, 1982. *The Export Credit Financing Systems in OECD Countries*. Paris: OECD.

PEARCE, Joan. 1980. *Subsidized Export Credit*. Chatham House Papers. London: The Royal Institute of International Affairs.

PISANI, Edgard. 1980. "Les données des échanges extérieurs de la France." Rapport d'information sur les enjeux et les conditions des équilibres extérieurs de la France, Sénat, première session ordinaire de 1978-1979, Tome II, no. 31, Paris.

PITFIELD MACKAY ROSS LTD. 1981. "Canadian Multinational Banks." Toronto.

QUÉBEC. MINISTÈRE DE L'INDUSTRIE ET DU COMMERCE. 1978. *Performance de la Direction des services internationaux et impact 1976-77 et 1977-78: Vol. 3*. Quebec: MIC.

RAYNAULD, André. 1979. *Le financement des exportations*. Montreal: Les Presses de l'Université de Montréal.

RENDELL, Robert S. 1976. "Export Financing and the Role of the Export-Import Bank of the United States." *Journal of International Law and Economics* 2:91-146.

ROYAL BANK. International Centres. Services Index. Annual. *Annual Report*. Montreal.

———. No date. "A Forfait Financing." Montreal.

———. 1975. "Exporting-Importing: Your Business Matters." No. 4. Montreal.

———. 1976. "Letters of Credit and International Trade." Montreal.

SOUQUIÈRES, Henri. "International Services Offered by Banks to Their Canadian Clients." *The Banker*.

SUMNER, M. T. 1980*a*. "Benefit-Cost Analysis in Canadian Practice." *Canadian Public Policy* 6:389-93.

———. 1980*b*. "Comments on the Public Sector Discount Rate: Response to Jenkins." *Canadian Public Policy* 6:648-50.

TORONTO-DOMINION BANK. Annual. *Annual Report*. Toronto.

TREMBLAY, Rodrigue. 1981. "La médiation financière et l'assistance financière à l'exportation." Mimeographed. Economic Council of Canada, Ottawa.

UNITED NATIONS. 1979. *Statistical Papers*. New York: UN.

UNITED STATES. CONGRESS. CONGRESSIONAL BUDGET OFFICE. 1981. "The Benefits and Costs of the Export-Import Bank Loan Subsidy Program." Mimeographed. GPO, Washington.

UNITED STATES. EXPORT-IMPORT BANK. Annual. *Annual Report*. Washington.

———. Annual. *Eximbank Record*. Washington.

———. 1977. *Report to the U.S. Congress on Export Credit Competition and the Export-Import Bank of the United States*. Washington: GPO.

VORBRODT, Michael. 1981. "Changing Perspectives in Trade Financing." Paper presented at the Ninth Annual Conference of COSTPRO, 27 May 1981, Toronto.

WALLEN, Alex. 1980. "Arrangements on Guidelines for Officially Supported Export Credits: Interest Rate Study." OECD, Paris.

WIELEMANS, Robert. 1983. "L'assurance crédit à l'exportation au début de la décennie 1980." *Revue de la Banque*, pp. 219-30.

WISECARVER, D. 1974. "The Social Costs of Input-Market Distortions." *American Economic Review* 64:359-72.